

AIRFIX

ONE SHILLING MONTHLY

magazine

For plastic modellers

JUNE 1963



IN THIS ISSUE

Space-saving model railway layout ★ Profile: Converting the Airfix Lancaster ★ How to build a 1:32 scale Lotus Elite for slot racing ★ Useful do-it-yourself tool for modellers

1!

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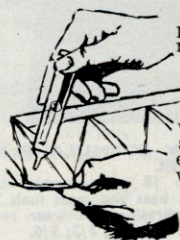
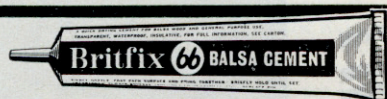
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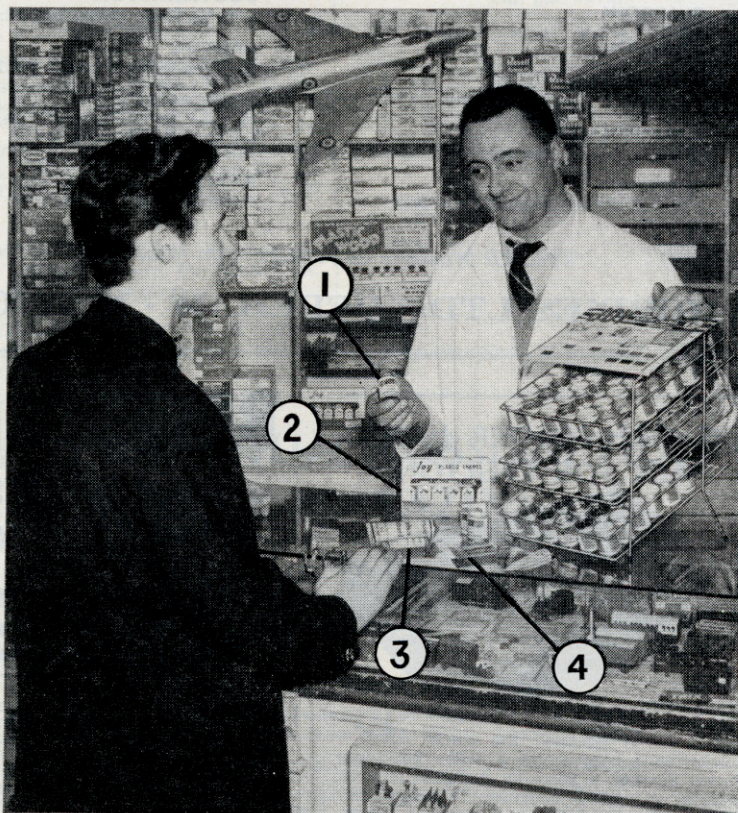
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AIRFIX

MAGAZINE

For plastic modellers everywhere

VOLUME 4 NUMBER 1 JUNE 1963 ONE SHILLING MONTHLY

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Modelling with a camera

IN his contribution on pages 8 and 9 of this month's issue, our model railway correspondent, Alex Bowie, gives some sound words of advice. He finds a camera is one of his most useful pieces of modelling equipment, particularly for showing up defects in a model layout.

Of course, like our contributor, we would be the first to point out that in modelling there is no substitute for good workmanship, or for knowing the correct approach before starting work. But we have no hesitation in endorsing Mr Bowie's advice.

From the large number of photographs which are continually submitted to our editorial office for consideration, we know that a great majority of our readers are already keen camera users. But we wonder whether they are really making the fullest use of their cameras.

At this time of the year, most people's thoughts are turning to holidays, which brings to mind another important modelling application of photography. Perhaps your vacation will take you on a first-time visit somewhere in the British Isles, or (if you are even more fortunate) to Europe. Whether your interest is in roads, railways, shipping or merely scenery, you will have countless opportunities to record on film some new ideas which will help you to add just that little bit extra, and more original, realism to your modelling.

Photography, we know from our experience, need not be a costly business. Cameras with quite surprisingly good performances can be bought very reasonably these days, though the cost of film is still quite a big consideration, particularly to our younger readers. But ten shillings spent on two or three dozen pictures is money well spent when you consider that it could save you a lot of head scratching for ideas, and perhaps even a fair sum in potential wastage of materials.

Contents

| | |
|---|----|
| In the air - <i>Alan Hall</i> ... | 4 |
| Wheelspin - <i>Bert Lamkin</i> ... | 6 |
| Layout realism - <i>Alex Bowie</i> ... | 8 |
| Shipping notes - <i>A. J. Day</i> ... | 10 |
| Plastic modelling - <i>Mike Bryant</i> ... | 12 |
| Railway review - <i>Norman Simmons</i> ... | 14 |
| On road and track - <i>Darryl Reach</i> ... | 16 |
| Profile - <i>M. J. F. Bowyer</i> ... | 18 |
| Book reviews ... | 22 |
| Picture page ... | 23 |
| New kits and models ... | 24 |
| Readers write ... | 29 |

Cover picture

In April 1955 Canadian Pacific introduced Canada's first stainless steel train with scenic dome cars. Hauled by two diesel electric units, The Canadian leaves Montreal and Vancouver every day on the 71-hour trans-continental trip of 2,881 miles. A third diesel unit is added for the 500-mile journey through the Rockies.

IN THE AIR

BY ALAN W. HALL

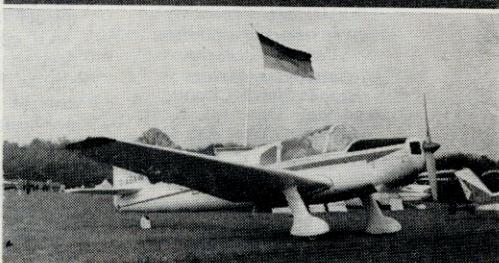
THE much vaunted Air Fair at Biggin Hill, held at the beginning of last month, must have been a little disappointing for the keen spotter who has been used to such grand occasions as the Shackleton Sales Weekends, usually held at this time of the year.

The object of the show was, of course, to demonstrate to the public the advantages of air travel and, as such, was a very worthy effort. It was a pity that the Corporations, BOAC and BEA, did not take part, leaving the main part of the exhibition to be taken up by the independents with British United very much in the lead. Their display in the main exhibition hall included Viscount G-APTC, backed up by a number of models of the new types of aircraft they shortly hope to have in service, such as the BAC-111.

Apart from a couple of large transport aircraft, a DC-7C of Caledonian and a Hermes IV of Air Links, the only other type worthy of calling a passenger carrier by any stretch of the imagination was Freighter G-AM11 belonging to Dan-Air. The rest of the show was made up with the lighter types, and included the usual collection of Beagles, Beeches, Cessnas and Pipers. Interesting visitors seen on the Thursday included OO-WAT, a Messerschmitt Me 108 painted dark blue with a brilliant dayglow spinner.

I was particularly interested in the Czechoslovakian display which, apart from the British registered Morava 'SHM and Meta Sokol 'RSP, included a Trener Master, OK-SNA. Rent-a-Copter had two Hiller UH-12 helicopters giving joy-rides at thirty shillings a head, and did a roaring trade.

The attempt by the organisers and their sponsors, the *Evening News* to stimulate the public's interest was a very good one, but it was a pity that this show had such wide publicity without being able to give a wider picture of the air travel business. Without more of the airlines being able to show off their aircraft, because of the restrictions on Biggin Hill's runway, it would have been a good idea to shift the venue of the exhibition to another airfield, where regular transport flights were going on all



From top to bottom: The Biggin Hill Air Fair, as seen from one of the Rent-a-Copter Hiller UH-12s. Two of the German aircraft at the show—the lively Bolkow Junior and the Bolkow KL107, G-ASAW.

the time. I, for one, hope that Maitland Drewy will stage a similar show again and will learn from the experience of this one.

★ Grumman are seeking to interest the United States Air Force in using the Hawkeye as an airborne warning and command aircraft. If they are successful this will be the second US Navy aircraft to be adopted by the Air Force. The first was the F-4 Phantom 2 which has become the F-110 in the USAF.

★ Canadair are currently offering ground attack and low-level surveillance and PR versions of the CL-41A Tutor jet trainer.

★ All of the Belgium Airlines Sikorsky S-58 helicopters which used to operate the inter-city service from Brussels have now been sold to the Belgian Air Force. Two are still being operated by Sabena, but will be retired as soon as overhauls of the first three for military service are completed.

★ Countries currently showing interest

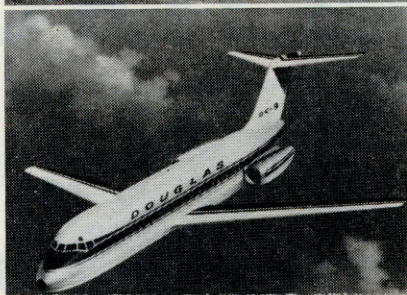
in the Breguet Atlantic maritime patrol aircraft are Japan, Australia, South Africa, New Zealand and Brazil. Look for firm orders coming during the Paris Air Show this month. Future plans for this aircraft include versions for cargo, electronic countermeasures, in-flight refuelling and stand-off bomb carrying. It is powered by Rolls-Royce Tyne turbo-props.

★ Both BOAC and KLM on this side of the Atlantic have sold surplus aircraft back to firms in the States. BOAC said goodbye to three of its ten DC-7Cs last month and KLM sold its last DC-6B to Wardair, a non-schedule carrier operating in northern Canada and Alaska.

★ In direct competition to the British Aircraft Corporation's BAC-111, Douglas have at long last decided to go ahead with the production of the twin-jet DC-9. With the British product selling in the States at considerably less than its competitor, the speculation on who will corner the market is considerable. At the beginning of May it was announced that de Havilland (Canada) a subsidiary of the other British aircraft manufacturing group, Hawker Siddeley Aviation, would produce certain assemblies of the DC-9 and although it has been said that this does not bring the two companies into direct competition the move is thought to have been made to gain the order of Trans Canada for Viscount and Vanguard replacements.

★ Two jet versions of the Avro 748 have been submitted to the board of Hawker Siddeley Aviation for consideration. One design features aft-mounted turbo-jets whilst the other uses podded engines

Continued on page 31



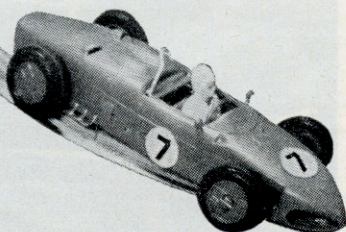
Top, above: *Austers in strange places. This one made a forced landing on a Manchester football pitch, after having trouble during a banner-towing sortie. It was flown out during the following day but, sad to relate, pranged again a little while later, on yet another Manchester football pitch! Above: The Douglas DC-9, which is to be built in competition to the BAC-111.*

Below: *Several members of No 56 Squadron, RAF, Wattisham, which provides this year's Fighter Command aerobatic team, are keen aero-modellers. In this picture S/L David Seward, their commanding officer, and two of his colleagues are putting a finishing touch to some Airfix Lightnings.*



WHEELSPIN

by Bert Lamkin



SO far, the emphasis of my monthly contributions has been on building and equipping your model motor racing layout. But as most enthusiasts know, that is only half the fun of miniature motor sport. There is a lot of enjoyment to be had from modelling and adapting various cars to suit your individual preference or circuit.

Although there are now four different Grand Prix cars in the current Airfix Motor Racing range, modellers have largely to use their own ingenuity if they wish to build racing replicas of other types of machinery such as Grand Touring, saloon or sports cars.

This month, I have chosen to describe the building of a 1:32 scale Lotus Elite, one of the prettiest of current Grand Touring cars. The body shell (from Super Shells, of Harpenden) is a very reasonable replica, although the moulded glazing is not a good fit in the window apertures—at least it wasn't on mine. So I used thin perspex sheet and cut the windows to fit, not forgetting to allow extra length for the curvature of the windscreen—it is best to cut well over size and trim gradually, until a good fit is obtained. Then careful applica-

tion of cement from the inside will secure.

Incidentally, when dealing with a curved surface such as the windscreen, one can secure one side first, and hold this in position with a block of wood and elastic band. Then glue the other side and similarly hold it in position. Finally, finish with top and bottom edges when the screen is in the correct position. Alternatively, the screen perspex can be pre-curved by heating gently. A point to mention is that polystyrene cement is not very satisfactory for the Super Shells body. I have used Evostik—very carefully to avoid excess marking of the exterior.

Having decided to use Airfix components, the first step was to make a chassis from aluminium, and a small piece of $\frac{1}{16}$ inch sheet was used. This was marked out to fit within the lower edges of the body, with an allowance to bend up between the wheels—this helping to stiffen the chassis. Another piece was bent up in the front to carry the Airfix front axle.

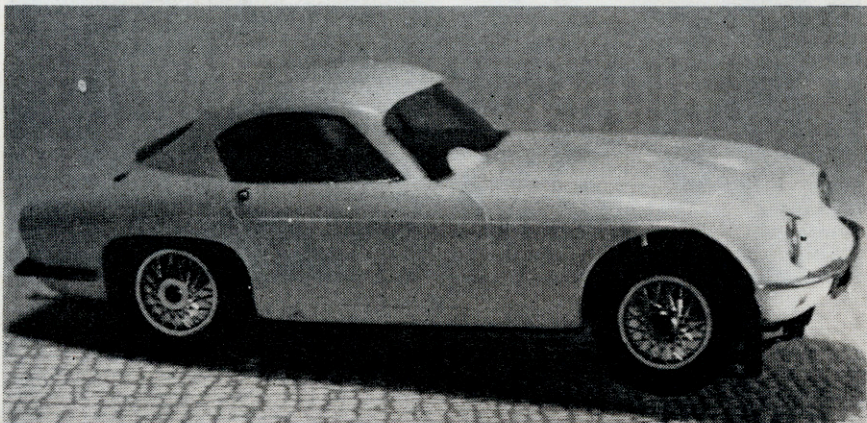
Before bending, clearances were marked where the front and rear wheels would be, governed of course by the arches in the body. Two apertures were also marked to clear motor armature and gear on the rear axle. The aluminium was then cut with a small saw and filed to shape, the front end being reduced to allow the wheels to steer.

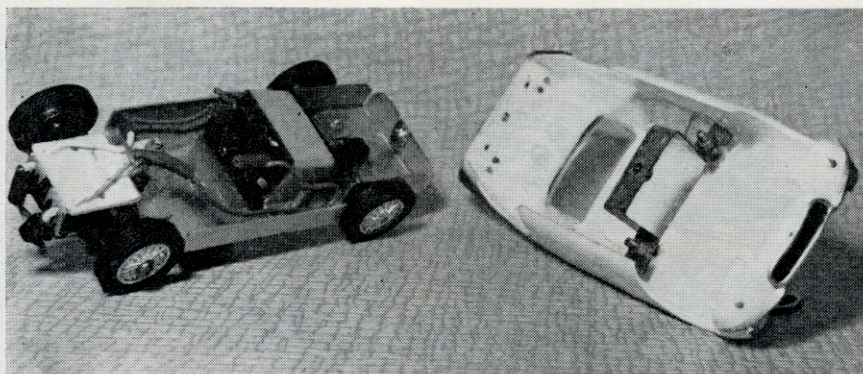
Pick-up fixing

When bent vertically, the front extension formed one anchorage for the pivot pin on the axle unit, a separate aluminium bracket making the rear support. It also provides fixing for the pick-up braids.

The axle unit was then located in holes drilled in the front and separate brackets. Plasticard was used to make the top retaining plate. This serves two functions—to control vertical swing, and provide fixing for the wires between motor and pick-ups. The plate is held by the same bolt that retains the rear bracket; the photograph shows the general arrangement.

To locate the pick-ups I drilled small





holes in the retaining plate and front turn-up. The motor leads were passed through and soldered to short lengths of Airfix braid; small pieces of rubber tube were slipped over the joints to insulate them from the chassis. Similar sleeves were used to hold the leads in contact with the motor pins.

The motor is held in position by an aluminium bracket bolted to the chassis. Small pieces of fibre give the necessary angle for the contrate gear, and also provide clearance at the top for the armature. I used railway sleeper strips for this purpose.

As aluminium is rather soft, I made a separate unit from tin to carry the rear axle and provide a body anchorage. This unit is really a U-shaped bracket, drilled at the sides for the axle to pass through, and having a 6BA nut soldered to the back for the body screw. Two small nuts and bolts (6BA) fasten the unit to the chassis. The position of this unit is chosen so that the wheels register with the centres of the body wheel arches. The motor fixing allows for final adjustment of the contrate gear.

Body anchorage

For the other body anchorage, a $\frac{1}{4}$ inch strip of tin is again bent to a U-shape—to bring the nut, soldered in the middle, near the chassis plate—and bolted to the body. Using the two middle projections moulded in the shell with 6BA screws (heads removed) glued to them, Evostick and a warm soldering iron fixed them firmly.

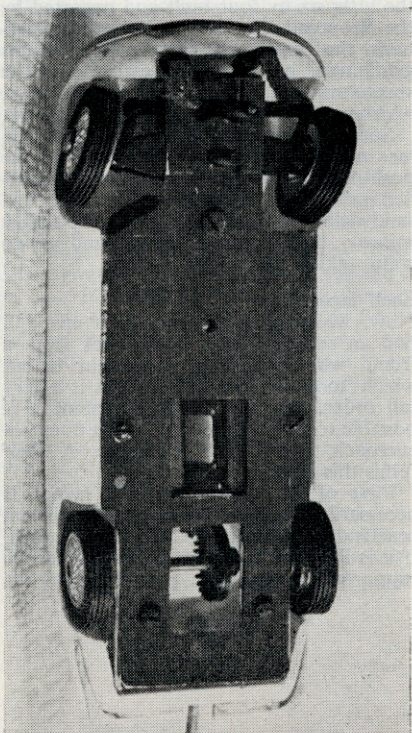
The wheels from Super Shells were drilled to take the standard Airfix fixing in the front, and to be a push fit on the back axle. Small washers were threaded on before clamping the wheels in a vice, allowing a small amount of side shake. It would appear that most miniature cars run better when the bearings are, from an engineering point of view, rather 'sloppy'.

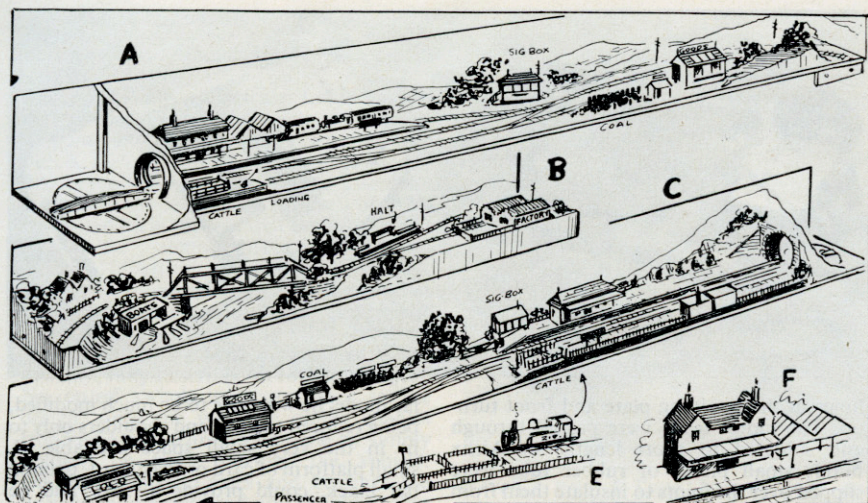
The reader will no doubt have spotted one item missing—the driver. With this particu-

lar model he will have to be much modified, being reduced to head and shoulders only to fit in the very small space available. A small platform of card or Plasticard, painted flat black, could provide a 'seat' and be glued either to the motor bracket, or between the sides of the body.

This version of the Elite is very much a 'quickie' but under test it performs very well. The accompanying photographs should clarify any points not mentioned. The axle heights were obtained from the drawing supplied with the body.

Below, left: The completed car. Above: Body and chassis units separated, to show installation of motor. Below: Underneath view, showing steering and rear drive.





LAYOUT REALISM

by Alex Bowie

LIKE most ardent modellers, I popped into the Model Railway Show, after Easter, which was better than ever this year. In spite of some superb club efforts, the layout which struck me as being a perfect product, in one respect at least, was the little six by four built and operated by the Reverend W. Awdry. It was not, perhaps, the best layout technically, but this gentleman, his fellow operators and the spectators were enjoying themselves hugely, which is, after all, the main point of a hobby.

Something on this little layout of particular interest to Airfix modellers was the push-pull, consisting of two slightly modified rail buses, painted teak brown, and sandwiching a small tank loco. For a *light railway*, these made a useful and cheap train, taking up very little space.

Shelf layouts

Now, while we're talking about space, I had an enquiry a few weeks back from a friend who wanted a permanent layout which 'took up none at all'. This is a very tall order, but if we stretch a point it is possible to build something which does not encroach unduly on floor space. A shelf fulfils this requirement.

First of all, though, a shelf layout is necessarily very narrow, and the minimum practical width would be about nine inches. If it is intended to be permanent, it can be supported on brackets, provided that the

household authorities agree! If they don't, then it could rest on furniture, or legs, or both.

But here's a warning. Partition walls, *ie* those which separate one room from another, are sometimes of lath and plaster, particularly in old houses. These don't take brackets and some other type of support must be used for the baseboard.

Pros and cons

As with every other compromise, you have to weigh up the advantages against the drawbacks of a narrow layout.

Some of the obvious advantages are as follows:

- 1 Every part of the baseboard is extremely accessible.
- 2 The long narrow layout can be more realistic than a single baseboard oval taking up the same square footage.
- 3 It can be far easier to accommodate in an already crowded room.

Some of its disadvantages are:

- 1 The problem of crowding a realistic layout into an exceedingly narrow space.
- 2 Curves will be limited in radius, though these can be disguised.
- 3 Scenic work will, in some places, have to be kept to the minimum.

On the other hand, some advantages not apparent at first sight will be found. For instance, it will be possible to build the

baseboard fairly high, so that you get a more realistic view of the railway. This once-popular high baseboard can be a nuisance on a big layout, but is practical on a narrow one.

Depth

The scenic effects have to be carefully planned, because within the narrow limits of nine inches we have to give the layout the appearance of having miles of depth. Yet this is not perhaps as difficult as it seems.

Firstly, tall close-up buildings should be ruled out, but plenty of sky and plenty of distant fields will give spaciousness.

Secondly, even within narrow limits, a little space should be allowed between the track and the edges of the baseboard.

Thirdly, buildings should be carefully chosen for size. Not too tall, or they will dwarf the layout, or make it cramped or enclosed.

Fourthly, half relief buildings should be introduced judiciously. A half building of only one inch depth can look surprisingly complete.

An example

Track formations will have to be tailored to suit the space. But I'm giving an example here of a small point to point. A turntable can be incorporated at each end, but they are perhaps best regarded as off-scene effects. Both turntables, you will note, are disguised by a tunnel (or built-up section), and this brings me to something which most of us overlook. Any branch of the 'big railway' should have some visible connection with the main line, so even if we don't have the turntables, one end of the track should appear to be extended through a tunnel or under a bridge.

Use a camera

The sketches give a good idea of the type of layout visualised, so little more need be said. This leaves a little time to talk about yet another branch of the hobby. I refer to photography. I find that a camera, even a simple one, is one of the biggest aids to good

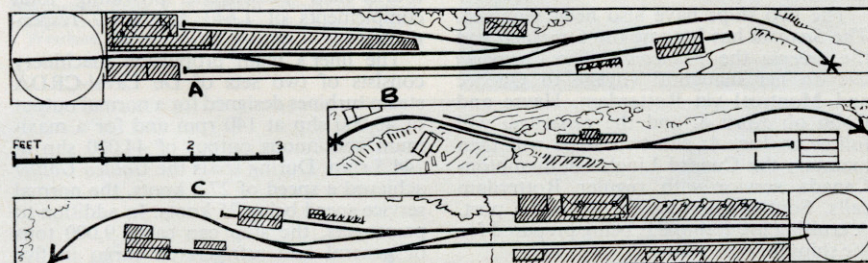
work. If there are any defects of workmanship in a layout, the camera will show them up almost cruelly.

Thus I find myself frequently modelling with a photograph of the model in mind. A photo is particularly useful where back scenes are concerned, for false perspectives are shown up immediately, and it is handy for recording detail in model work.

In this respect, modellers may have noticed the extraordinarily fine quality of the 'Model Railway Constructor' layout photographs lately. A set of pictures last month got the absolute maximum out of a simple layout, and is well worth a close study. It showed particularly that, with well designed effects and clever photography it is difficult to tell where the flat back scene meets the more solid parts of the scenery.

Of course, films cost money, but you don't have to be continually photographing the layout. Look at it through the viewfinder, as you progress, even invest in an artist's reducing glass, or simpler still a postcard-shaped hole cut in a piece of black card. It's amazing how this helps to frame a scenic detail, so that you can concentrate your eye on it.

Above, left: Fig 1. This pictorial view of the shelf layout shows how it is divided into three 'shelf' baseboards, A, B and C. Note at E how passengers on this very sleepy branch enter one platform at the side of the cattle dock. Don't get them mixed up, though! A level crossing gate has been worked in—though it is assumed that road traffic is very light indeed. If it wasn't, there would be some very frustrated motorists during shunting operations. F shows cut-down canopy kit modified to make a sawtooth, plus a short canopy in front of the station building. This building can be a shop or house kit modified, or a booking hall rebuilt into a higher building as in sketch A. Below: The layout plans also show the three boards separately. They meet as indicated at X and Y. Turntables can be full size, or cut to baseboard width. One of each is shown.



SHIPPING NOTES

by A. J. Day

APART from the real marine enthusiasts, most youngsters thinking about ships invariably contemplate passenger liners and men-o'-war. This is not to be wondered at, because these types of vessels are the ones that capture the imagination most and, of course, are the ships that get the most publicity from films and television programmes, in addition to our daily newspapers.

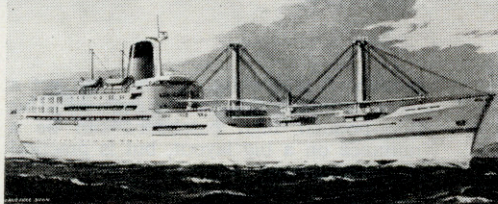
However, in this series of articles I have tried to widen the vision of our youthful readers by introducing them to ships of all shapes, sizes and occupations that ply the trade routes of the world. But this month I can return to what I suspect is their favourite subject, for passenger ships are once again in the news.

New 'livery' for Cunarders?

The Cunard liners *Saxonia* and *Ivernia* have been converted into dual-purpose Atlantic liners and cruise ships at the Clydebank yard of John Brown & Co (Clydebank), Limited. These conversions go a good deal further than a conventional refit. They put into effect the Cunard Line's 'new look' in ship design and new drive for passengers in the Canadian and cruise trades. The conversions fall into four distinct operations: (1) The elimination of three after hatches and holds with all their cargo-handling equipment, and the rebuilding of the entire superstructure to make way for a new lido deck, swimming pool, and a new night club above; (2) extensive alterations in all public rooms, including new decoration and lighting; (3) full air-conditioning throughout passenger and crew accommodation; and (4) private baths or showers and toilets throughout practically the whole of the passenger accommodation.

The two ships have also been renamed. The *Saxonia* has become the *Carmania* and the *Ivernia* the *Franconia*. The *Carmania* left on her inaugural voyage to Quebec and Montreal via Rotterdam, Havre and Cobh on April 8, and the *Franconia* will follow on June 4; the two ships will then maintain the Cunard Line's Southampton-Canada service with regular Rotterdam calls, Southampton being the home port. A cruising programme is being prepared for the ships for next winter.

A colleague who has already travelled



Artist's impression of Alfred Holt's passenger-cargo ship *CENTAUR*, expected to be in service between Fremantle and Singapore early next year.

in the newly-converted *Carmania* tells me that it was impossible to recognise any part of the ship as she was. 'The metamorphosis is complete, and the improvements effected are beyond praise', he said. *Carmania* has a new colouring—an eau de nil hull instead of the traditional black—and it is believed that all ships of the Cunard fleet may eventually wear this new 'livery'.

New flagship for Lloyd Triestino

During the last week of April, Lloyd Triestino's new flagship, the turbine passenger liner *Galileo Galilei* (27,500 tons gross), left Genoa on her maiden voyage in her owners' Australia service. She and her sister-ship *Guglielmo Marconi*, still under construction, have been designed to replace the three 13,000-ton vessels previously employed on this service. The *Galileo Galilei* was built by Cantieri Riuniti dell'Adriatico, Trieste and Monfalcone; she is fully air-conditioned and is fitted with Denny Brown stabilisers.

Her principal dimensions are: length 670 ft 9 in; moulded breadth, 93 ft 10 in; depth, approximately 65 ft 5 in. She has a fine external line with a cruiser stern, clipper bow and streamlined funnel; her superstructure has been built mainly of light alloys. The vessel's normal complement is 1,668 passengers—154 first-class and 1,514 tourist-class, but this arrangement can be changed to satisfy passenger demand so that she can also carry 289 first-class and 1,358 tourist-class passengers or, alternatively, 103 first-class and 1,574 tourist-class passengers, providing total complements of 1,647 and 1,677 respectively.

The liner's main propulsion machinery consists of two sets of De Laval-CRDA steam turbines designed for a normal output of 40,000 shp at 140 rpm and for a maximum continuous output of 44,000 shp at 144.5 rpm. During trials the *Galileo Galilei* achieved a speed of 27.4 knots, the normal service speed being 25 knots. In addition to passengers, the ship can carry 9,000 tons of general and refrigerated cargo in five holds.

Passenger/livestock vessel

Alfred Holt and Company have announced details of the new specialised liner for their Fremantle-Singapore service to replace the *Charon* and *Gorgon*. She is the *Centaur* (8,000 tons gross) building at the yard of John Brown and Co (Clydebank), Limited, at a cost of more than £2m. She is expected to be launched in June and in service by January next year. Designed for a service speed of 20 knots, the *Centaur* will have a length oa of 480 ft 6 in, a moulded breadth of 66 ft and a depth moulded to shelter deck of 38 ft 9 in. Accommodation is provided for 200 passengers on three decks.

The *Centaur*, however, will also carry livestock and general and refrigerator cargo. Cattle and sheep spaces, refrigerated cargo spaces, deep tanks and most of the general cargo spaces are situated forward of the machinery, while all the accommodation is positioned in the after half of the ship. A total of 700 cattle or 4,500 sheep can be housed in specially-designed pens. Dairy cows will be carried at the same time as the sheep to produce the ship's own supply of cream and butter. The *Centaur* will be powered by two 11-cylinder supercharged two-stroke oil engines built by Burmeister and Wain, Copenhagen, each developing 9,250 hp at 180 rpm.

Commissioning of HMS 'Dreadnought'

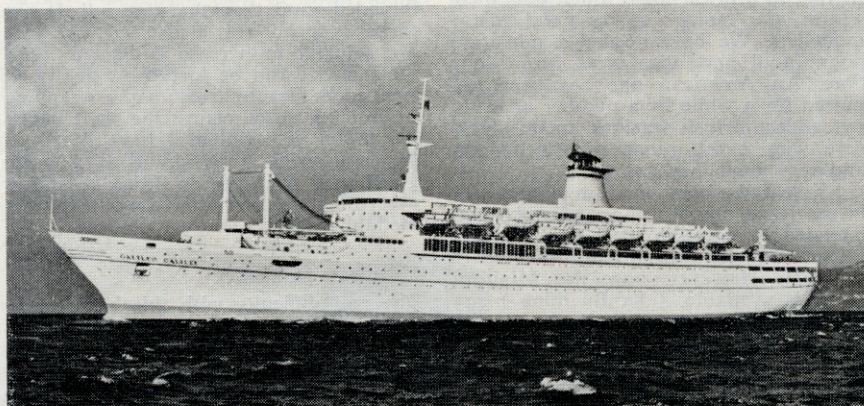
The Royal Navy's first nuclear-powered submarine, HMS *Dreadnought*, was commissioned for service at the Barrow-in-Furness shipyard of Vickers-Armstrongs (Shipbuilders), Limited, in April. The *Dreadnought* is the most expensive vessel ever built for the Royal Navy; her cost has been quoted as £18,055,000. Her nuclear

reactor was purchased complete from America. Little has been announced about this new submarine for she is naturally shrouded in secrecy. One or two things might be said, however; she is notable for her spaciousness and new methods of torpedo control. Dimensions announced at her commissioning were: length 266 ft; beam 32 ft; and surface displacement about 3,500 tons. The ship's company consists of 11 officers and 79 ratings.

HMS *Leander*, the first of the new class of frigates to complete, has also been commissioned for service with the Navy. She was built by Harland and Wolff, Limited, Belfast. The *Leanders*, 12 more of which are on order, have been developed from the *Whitby*- and *Rothsay*-classes, both noted for manoeuvrability, performance at high speed and seakeeping qualities. The same hull form which has been largely responsible for these qualities is being used for the *Leanders*, and geared steam turbine machinery will provide adequate speed and endurance for their varied tasks. HMS *Leander*, whose standard displacement is about 2,000 tons, has a length of 372 ft and a beam of 41 ft.

She has an armament consisting of two 4.5 in guns in a twin mounting directed by a fully-automatic radar fire control and gun direction system, two 40 mm anti-aircraft guns in single close range mountings and a triple-barrelled anti-submarine mortar. The 40 mm guns will eventually be replaced by Seacat ship-to-air launchers and directors. HMS *Leander* is fitted with the latest equipment for detecting and attacking submarines and carries a helicopter. She has an improved bridge structure giving greater all-round visibility, especially astern, than has been possible in previous ships with enclosed bridges. The ship's complement consists of 17 officers and 245 ratings

The GALILEO GALILEI, new flagship of Lloyd Triestino.





Plastic modelling

by Mike Bryant

POWER TO YOUR ELBOW

TO round off this quartet of articles on general plastic modelling, and to bring things right up-to-date, I should like to consider the latest power tools which have only just come on to the market in a price range which puts them within the reach of a great many modellers. We have needed a miniature power tool and accessories for a long time. An American one has been imported for a while by a number of firms, but at last British versions are available here with a full range of attachments, and very good they are, too.

I have had a home-made miniature drill in use for a number of years, and I had intended to describe it in these articles so that modellers could equip themselves similarly. However, now the Minidrill range is available, I hardly think many people will want to go to the trouble of making their own. The chief difficulty in making your own power drill is the fitting of a chuck to the shaft of any

of the medium or larger miniature Japanese motors now on the market.

For a chuck I used a small Eclipse pin vice. You can force off the hollow shaft handle—it is a taper fit and is *not* threaded—and then the motor shaft has to be wrapped with a layer of fuse wire and soldered to increase its diameter until the pin vice can be forced on tightly. It is a good idea to true up the wrapping by holding a file against the shaft whilst the motor is running. I have heard of someone using a Rawlplug as a bush, glued with Araldite or Bostik to stiffen everything up, but I have not tried this method myself.

Extra care pays off

The real difficulty with this home-made type of drill is getting the chuck to revolve without wobble, and several attempts at mounting it may be necessary before a wobble-free drill results. There

Left: *The No 6 Minidrill in use, with a 4½ volt battery connected.*

is nothing like a bit of 'shake' on a chuck for breaking small high-speed drills—so a bit of extra care here will pay dividends.

With either a home-made drill or one of the new Minidrills it is no good thinking you can do any and every sort of drilling and grinding. They are, after all, relatively low powered tools and must be treated accordingly. But they are excellent for plastic modelling and for use on thin, soft metals. And, of course, their uses are not limited to drilling only, as the makers are importing a full range of accessories—quite a large proportion of which you have probably seen in less congenial surroundings in the dentist's chair!

For most of the operations which a modeller in plastic wants to carry out, the No 1 Minidrill will be quite adequate. This is a most ingenious little machine built into a torch case, and driven by two U2 batteries, the tools being a force-fit in a special bush on the motor shaft. The beginner's outfit with the No 1 drill contains tools for drilling, grinding and polishing at an all-in price of 27s 6d—which is pretty good value. The batteries housed in the case drive the spindle with sufficient power for most plastic operations, but the motor is, in fact, under-powered on 3 volts, and special versions of the No 1 drill can be had with external terminals so that it can be connected direct to 4½ or 6 volt batteries to give greater power and longer life.

Compact and flexible

This is particularly useful where you are relying on a single drill for both light and (comparatively speaking) heavier jobs. To me, the great point in favour of the No 1 drill is its compactness and flexibility; it is surprising the number of jobs you can do with it, and it is extremely handy to have a small power tool you can use anywhere without trailing wires and external batteries.

The more powerful Minidrills (Nos 3-6) do have external batteries and leads and are capable of doing heavier jobs than the No 1. They can, of course, be run from a transformer/rectifier and railway modellers may have a head start here over a lot of people. Be careful, though, not to damage the motor by feeding it more 'juice' than you should—the instructions show the voltage to be used for each drill.

I have used the No 6 Minidrill a lot

and it certainly is a powerful little beast for its size. But with all the drills, do remember not to overtax their capabilities; use them lightly and keep the motor running fast. Keep your drill points clean and clear the hole you are drilling frequently. Work with a light pressure and let the speed of the drill do the work, not the pressure on it.

There is a bewildering range of accessories available for use with the Minidrills: grinding wheels, drums and points; miniature circular saws; polishing mops and wheels; rotary brushes; burrs of several shapes and milling wheels and cutters. Each has its use—but I would like to end with one word of caution: be very careful with the circular saws—they are razor sharp at any time and when revolving 5,000 times a minute need watching carefully! I always try to use them with the work held in a vice or firmly pinned down on a cutting board. That way you can concentrate your attention on the saw and where it is going.

One final word this month concerns the Drewry competition, results of which appeared last month. We did promise to publish pictures of the winning models this month, but I'm afraid we underestimated the time necessary to obtain the prizewinning entries and have them photographed. This is now being organised, and they will appear as soon as space permits.

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IN THE AIR—Continued

mounted under the present wing. Both versions make as much use as possible of existing Avro 748 assemblies and it is thought that the aircraft will be produced in competition to the Jet-Herald and Fokker F-28.

★ Many correspondents have asked me for details and serial numbers of aircraft in the Rhodesian Air Training Group. Unfortunately I can only supply a few of these and most of them have already appeared in these columns. Enthusiasts might, however, like to write to Flt Lt J. T. C. Long, Officers' Mess, RAF, Geilenkirchen, BFPO 42 who can possibly help. In return he would like to correspond with any model maker who can supply him with photographs or details of colour schemes of No 3 Squadron aircraft, particularly for such types as the Snipe, Gamecock, Hurricane 1, 2A and B, Vampire 5, Westland Walrus and Avro Bison.

RAILWAY REVIEW

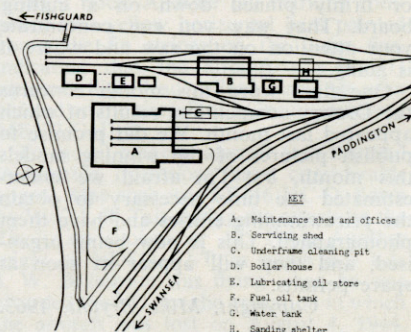
BY NORMAN SIMMONS

A NEW £1m diesel locomotive depot was completed at Landore, Swansea on May 3 and is illustrated this month. The new depot occupies the site of the former steam motive-power depot, and is laid out and equipped to cater for nearly 200 diesel locomotives of all types. Initially, 175 locomotives will be allocated, consisting of 93 2,750 hp and 25 1,750 hp diesel-electrics, 37 1,700 hp and 20 650 hp

diesel hydraulics and some 30 diesel shunters.

The chief feature of the new depot is a 210 feet long reinforced concrete maintenance building over four tracks, each with 150 feet long inspection pits. A separate servicing bay will refuel with oil and water up to six locomotives at one time. Three days' consumption of fuel oil will be contained in a 70,000 gallon capacity storage tank, which will be topped up by daily deliveries in railway tank wagons. One very welcome feature of the new depot is a washing machine which will allow all diesel locomotives to be cleaned every day.

This new diesel depot makes an important step forward in the WR modernisation plan to change over completely from steam to diesel power.



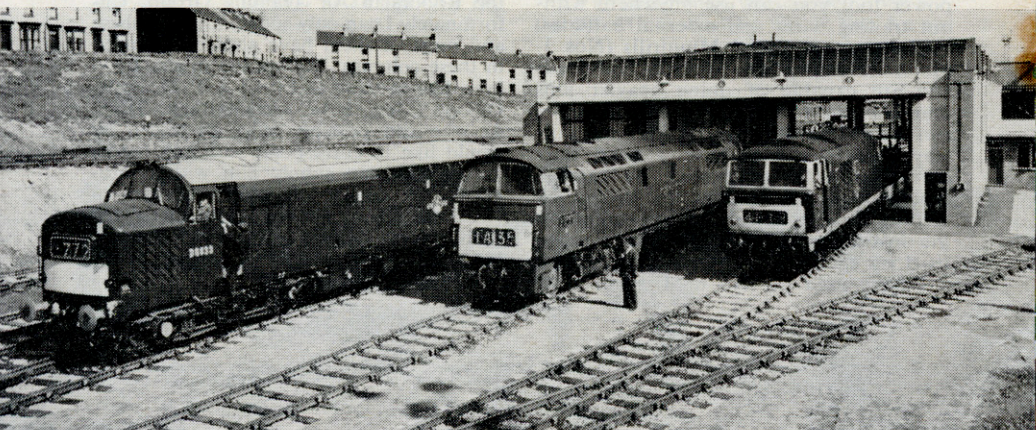
Above: Of great interest to modellers, this diagram shows the layout of the new diesel locomotive depot at Landore, Swansea. Below: A line-up of modern Western Region motive power outside the servicing shed of the new depot. Left to right is an English Electric Type 3 Diesel-electric D6833, Western Type 4 Diesel-hydraulic D1045 Western Viscount and an unidentified Hymek Type 3 Diesel-hydraulic.

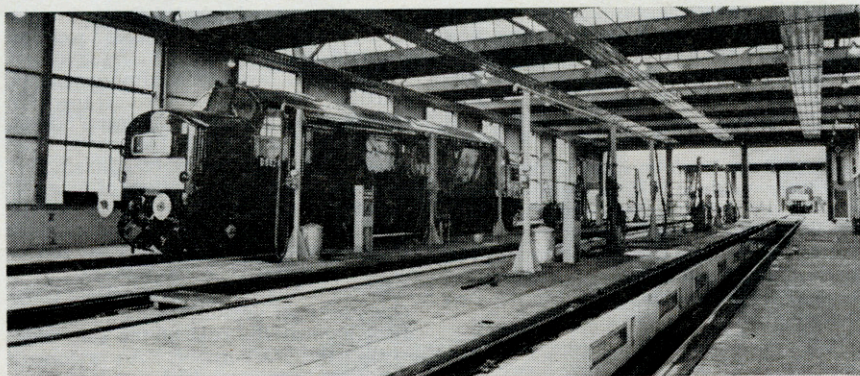
R & ER news

I am reminded by the latest issue of the 'R & ER Newsletter' that the operating season is now in full swing. *River Esk*, which helped with the Easter traffic, is to be joined by *River Irt*, which has been fitted with a new all-welded firebox. *Royal Anchor* and the passenger tractor have also been overhauled. A special train named the *Eskdale Express* will leave Glasgow, Buchanan Street, at 8.34 am on June 8 to give Scottish supporters an opportunity to make a return trip on the R & ER line.

LT locomotive preservation

In the March issue I illustrated and referred to the withdrawal by London Transport of





The interior of the new servicing shed at Landore with D6821 receiving attention.

L52, the last ex-Metropolitan Railway F Class 0-6-2 tank locomotive. I have now had news of the formation of an appeal fund to raise £500 for the purchase of this locomotive for preservation. This appeal is issued in conjunction with the London Railway Preservation Society, who have agreed to take custody of the locomotive and run it on a vintage railway they plan to operate in the countryside convenient to North London.

Any readers interested in contributing towards this appeal should send crossed postal orders or cheques (made out to 'The Met Tank Appeal'), to J. C. Stringer, Esq, 2 Gibbon Road, Acton, London, W3.

Flying Scotsman on Festiniog special

The Annual General Meeting of the Festiniog Railway is always an occasion for a special train to carry supporters of the railway to Portmadoc. This year the special was hauled from Paddington as far as Ruabon by Mr Pegler's *Flying Scotsman*, now nicely restored to LNER livery and bearing its former number, 4472. The engine attracted huge crowds en route, and well over 600 people were assembled to see the train arrive at Ruabon, where the accompanying photograph was taken.

East Coast route accelerations

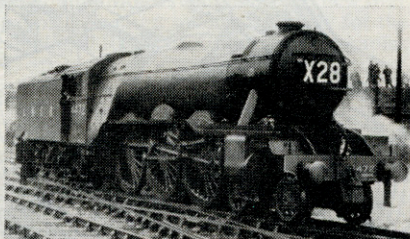
The already excellent service on the Eastern Region from Kings Cross will be further improved with the summer timetables. No less than 84 services each week on the East Coast route will be accelerated by between 10 and 63 minutes. Ninety-three runs will be timed at average speeds of 60 mph or more, start to stop, and the star turn will be the 7.45 am from Kings Cross

to Leeds, which will cover the 106 miles from Hitchin to Retford at an average speed of 72.6 mph—a BR record for a distance of over 100 miles.

Locomotive notes

Reported deliveries of new locomotives are as follows: D1017 *Western Warrior*, D1018 *Western Buccanear*, D1019 *Western Challenger*, D1056 *Western Sultan*, D1057 *Western Chieftain*, D1058 *Western Nobleman*, D1059 *Western Empire*, D1060 *Western Dominion*, D1061 *Western Envoy*, D1062 *Western Courier*, D6819-23, 29-31, 33-36, D7072-6, 8 to the Western Region; D5183, 6-90, E3076-8, 80 to the London Midland Region; and D1514-7 to the Eastern Region. D5177-81 and D6790-5 were delivered to the North Eastern Region, not the Scottish Region as reported in last month's issue.

Four West Country Pacifics recently taken over by the Western Region have been put to store. Four more Pacific locomotives have been reported withdrawn, including the first of the Coronation Class, 46220 *Coronation*; two A3s, 60047 *Donovan* and 60074 *Harvester*; and one A4, 60013 *Dominion of New Zealand*. One of the LMR Type 4 diesels, D229, has been named *Saxonia*.



4472 Flying Scotsman at Ruabon after working the Festiniog Railway Society special from Paddington.

AFTER many months of rumour and speculation, the Rootes Group's new 'baby' car—the two-door Hillman Imp—has made its public debut. It is to be produced in a large new modern factory at Linwood, near Glasgow, and is the first car to be made in Scotland for 30 years.

One of the Imp's most exciting features is its rear-mounted, 875 cc, overhead camshaft engine, which is the first all-aluminium power unit to be fitted to a mass-produced British car. It gives the Imp a top speed of over 75 mph, a 0 to 50 mph acceleration time of 15.5 seconds and a touring fuel consumption of over 40 mpg.

The Imp's accessible engine, which is inclined at 45 degrees to save space, is a development of the 750 cc overhead camshaft Coventry Climax unit which was fitted to the Lotus that won the Index of Performance at the Le Mans 24-hour race in 1957. It weighs only 170 lb and is obviously capable of considerable development by competition-minded owners. As fitted to the Imp it produces 42 horsepower at 5,000 rpm (on a 10:1 compression ratio) and gives this 13½ cwt car a healthy power-to-weight ratio of 61 horsepower per ton.

Independent suspension is fitted to all four wheels, and the car has no greasing points (routine servicing is necessary only at 5,000-mile intervals). The gearbox, controlled by a floor change, has synchromesh on all four forward gears. There are two luggage compartments (one at the front and one behind the rear passengers) and

Mechanical make-up of the Imp is clearly shown in this cut-away drawing.

the rear seat can be folded flat to increase load space. A headlamp flasher is a welcome standard fitting.

The cockpit layout of the Imp is neat and practical, with a full-width parcel tray. The de luxe model has additional metal pockets on the doors and beside the rear seats, in similar fashion to the BMC Minis.

A completely new feature of the Imp is its pneumatic system of throttle control, developed by Dunlop, which gives more precise control. The conventional rod or cable control has been replaced by a diaphragm under the accelerator pedal. This exerts air pressure along a tube to a diaphragm at the rear of the car, which works the carburettor. An automatic choke is fitted as standard.

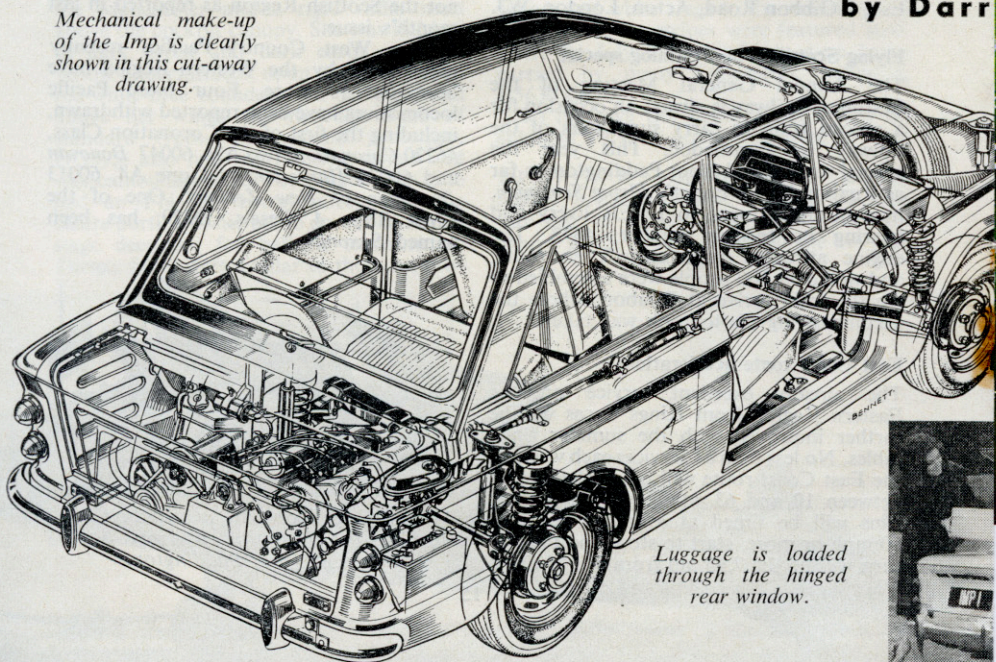
Two versions of the lively little Imp are available—the De Luxe (at £532) and the standard model at £508. They share the same basic specification, but the De Luxe has, as standard, a heater, windscreen washers, sun visors, fitted carpets, and front quarter lights.

Hard and fast

Only seven cars out of the original 84 starters survived the gruelling 3,200 miles of this year's East African Safari Rally. Three of the seven finishers were French-made Peugeot cars, one of which, a 404

ON ROAD A

by Darr



Luggage is loaded through the hinged rear window.





Erik Carlsson and Gunnar Palm put up a fine performance in the Safari Rally with their Saab, until forced to retire after hitting an ant-eating bear. Here their car is passed by the winning Peugeot 404.

AND TRACK

yl Reach

crewed by Nick Nowicki and Paddy Cliff, emerged the winner.

An Anglia Super, driven by Peter Hughes and Bill Young, was one of two British cars to finish, in second place. The other, a Rover, came seventh. The Saab of Erik Carlsson and Gunnar Palm lead convincingly for the first two-thirds of the rally, but was eventually forced to retire after hitting an ant-eating bear. The hazards of African motoring . . . !

3,500 models go on show

A permanent exhibition of over 3,500 model cars was opened in Stratford on Avon at Easter. The models have been collected from many countries over the



last 15 years, by Mr Tibor Reich and his two sons Anthony and Shani. Most of the models are manufactured by leading makers, but quite a few have been assembled and painted by the two boys.

The collection shows the wide variety of motor car design through the years, and includes a number of models of horse-drawn coaches and railway coaches as an introduction to the story of the motor car. Some 80 cabinets, specially designed by Mr Reich, house a large proportion of the collection.

A veteran and vintage section includes a realistic car rally scene from 1900, while another display demonstrates a cross-section of a motorway complete with models of road-building equipment. Several car manufacturers, including Rolls-Royce, Ford, Standard, Austin, Vauxhall, Mercedes and Fiat, have supplied information and photographs of their cars. The American Pontiac Motors company even flew over two of their latest models, specially for the exhibition! Revell of America and Anguplas of Spain have also sent a selection of models.

Mr Reich, who is a well-known industrial and fabric designer, started his collection chiefly to study (as a hobby) the development in design of the motor car. The range of models now extends from the first steam motor car, made in France in 1760, to the very latest ideas in present-day car design.

The Tiatsa Car Model Museum is situated at 60 Ely Street (opposite the Town Hall), in Stratford on Avon.

PROFILE

Conversion possibilities with the Lancaster

AT first thought it is likely that the model maker will conclude there is little in the way of kit conversion offered by the Lancaster, but pause for thought will show this is far from being so. If one finds no appeal in direct derivatives of the bomber, then surely amongst the mass of simple modifications to the Lancaster, and differing markings, there is something to interest any model maker not content just to complete the kit with the transfers provided and in the colours suggested.

An easy series of modifications will produce the prototype Lancaster, BT308. She had three fins and the short span tailplane of the early Manchesters, engine cowlings similar to those of the Beaufighter II, no dorsal turret, a rear turret similar to that of the Manchester and a rigid radio mast above the cockpit canopy. She was finished in dark green and dark earth and had yellow undersurfaces, upon which appeared red-white-blue roundels. On her sides and above her wings the roundels were of standard types. The second prototype, DG595, also had red fuselage serials and was camouflaged like her predecessor. She had an FN 21 ventral turret, and the centre portion of her bomb doors was at one stage deepened for ballistic experiments. Turrets fitted were similar to those on pro-

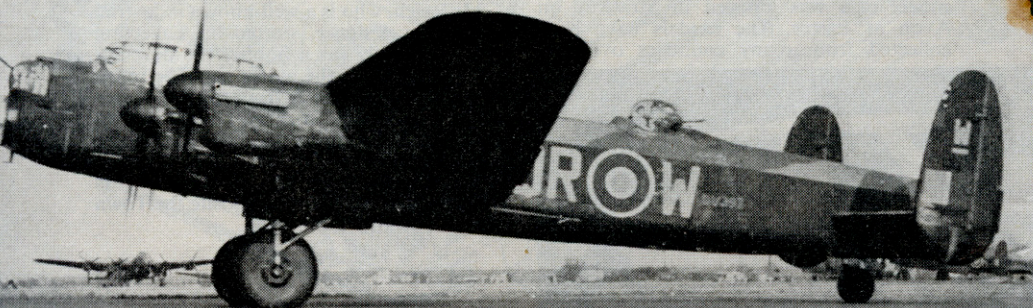
duction Lancasters, but DG595 at first carried no fairing around her dorsal turret. Both machines, at varying periods, carried the yellow 'P' prototype marking in yellow. From her birth, the second had twin fins and the 33-foot span tailplane.

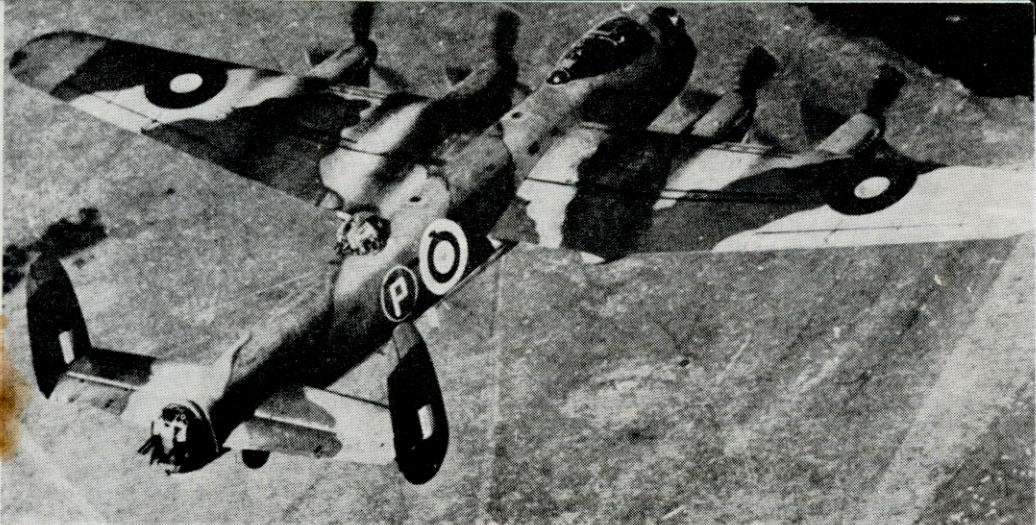
A series of Lancaster models would surely have to include L7546 which, on March 3, 1942, was one of those chosen to make the first operational sortie by the type; and L7536:KM-H which was one of those making the first bombing raid by a Lancaster, on the night of March 10/11, 1942. Both belonged to No 44 Sqn, the first to be fully equipped with Lancasters and which sent six of them on the spectacular daylight raid on the MAN works at Augsburg on April 17, 1942, on which occasion Sqn Ldr J. D. Nettleton, flying in R5508:KM-B, was awarded the Victoria Cross. His aircraft was one of the comparatively few fitted with an FN 21 ventral turret. L7536 was lost on this operation, likewise L7565:KM-V. No 97 Sqn, the second to receive Lancasters, also participated in the raid, its OF coded aircraft including L7573:K and R5488:F. These aircraft all had light grey codes and serials, and in the case of 44 Sqn the unit letters ahead of the roundel on the port side and the individual letter ahead on the starboard were half the normal size of Lancaster code letters.

The first major change in Lancaster markings came in May 1942, when red code letters and serials were introduced, an early example carrying them being R5610:OL-G of No 83 Sqn. The narrow yellow and white rings in the roundels and white in the fin stripes were featured soon after. By July these markings were being carried by many Lancasters, including R5630:OL-T.

To improve the bomb aimer's view an enlarged Perspex dome was fitted to later

DV397:QR-W exhibits another unusual feature, her individual letter on her fin. She was lost in action on a Berlin raid on March 24/25, 1944. For a while she was also QR-N of 61 Sqn.





production aircraft and retrospectively to earlier machines. During April 1943 the Lancaster III came into squadrons, powered by American-built Merlins, but externally the new mark resembled the earlier. One of the first used was W4990:PH-V of 12 Sqn, which made its first operation on May 13, 1943 and subsequently was used by No 626 Sqn.

A feature which aroused much interest at the time of its introduction was the large ventral radome, or what was colloquially known as 'the bump', which contained H2S radar gear. At first, Lancasters carrying this had a '/G' suffix to their serial numbers, but in the closing months of the war few aircraft had the marking. Examples with the /G included JB683:OF-C, and PB423:JI-Z of 514 Sqn, in use October 1944 and which in August had been 'S' of the same squadron. Both had the enlarged nose domes. Late production Lancasters did not have the slit windows along the fuselage side and many had a long intake on the starboard side of the fuselage above the mainplane, evidenced by NG118:A2-E of 514 Sqn, which was somewhat unusual in that she had blue spinners indicating her Flight colour. A pitot head beneath the nose was a feature of production Lancasters, and a later modification was the fitting of a small backward facing chute on the starboard under side of the nose.

A subject which has much appeal for the model maker is a 'dam buster' Lancaster, about which much has been written in recent issues of *Flight International*. The 23 specially-modified aircraft had their dorsal turrets removed, also their bomb doors. The bomb bay floor was of revised shape, and a single gun was installed in a similar position to the ventral turret on early aircraft. Two V-shaped struts held the weapon in place and a chain drive rotated it.

The second prototype, DG595, can be seen to wear the usual camouflage pattern applied to the Lancaster bombers.

For the operation Guy Gibson flew in AJ-G:ED932/G. Bomb bay modifications were also a feature of Lancasters which carried the normal 12,000 lb bomb, in which case the bomb doors had a central bulge incorporated. Many of the Hercules-powered Lancaster IIs had this as a standard fitting, such as DS796:JI-E which did not have H2S. Hercules engine cowlings from the Airfix Beaufighter can be wedded to the Lancaster model, but to do this new nacelles need to be made, or additional fairings added to the existing nacelles. The first two dozen or so Mk IIs had Hercules VI engines, with spinners like those of the Beaufighter X. The remainder of the 300 Mk IIs had revised air intakes, etc, as indicated in the diagram. One of the early machines was DS620:KO-W of 115 Sqn and the later types are typified by LL625:JI-C, LL723:EQ-H and DS741:OW-T. Many Mk IIs had provision for a ventral turret, but usually the fairing aft of the bomb bay was removed and no turret installed. This was not true of the prototype, DT810, however, which retained her prototype colouring and under turret throughout her life. The Mk IIs were phased out of operational service during the summer of 1944, after having been introduced in the spring of 1943.

On March 14, 1945 PD112, a Lancaster B1 (Special) YZ:S of 617 Sqn flown by Sqn Ldr Calder, carried a 22,000 lb 'Grand Slam' to the Bielefeld Viaduct. Subsequently 40 'Grand Slams' were dropped before the war ended, from Lancasters whose bomb doors had been removed and the ends of the bomb bays specially faired off. These aircraft wore standard camouflage initially, but

Continued on next page

PROFILE—Continued

their undersurfaces were subsequently repainted a silvery grey. These latter colours were worn, in December 1945, by PD129 which, after having served as KC:G of 617 Sqn had become LS:R of 15 Sqn for bombing trials against the U-boat pens at Farge. PD129 had white code letters, 'LS' being ahead of the roundels on both sides of the fuselage. Her dorsal turret had been removed and she had two .50 in guns in her rear turret. The nose turret had, as was customary on the B1 (Spec), been removed. Paddle bladed airscrews were fitted. Thirty-two B1 (Spec) were produced, PB995-998, PD112-139.

Closing weeks of the war witnessed coloured fins and rudders applied to the Lancasters of some squadrons, including 44, 57 and 460. These were tactical markings to render units easily identifiable during daylight raids. Another tail marking comprised two yellow horizontal bars painted above the fin stripes on the outer fins, indicating that the aircraft was a GH equipped flight leader. Such markings were painted on the aircraft of 3 Group, including ME422/G:JI-Q.

To model makers, aircraft that featured in notable operations have considerable appeal. One such was EE146:KC-D, flown by W/C J. B. Tait during the attack on the Tirpitz on November 12, 1944. Another might be ND811:F2-T, in which Sqn Ldr I. W. Bazalgette was flying when he was awarded the VC, for the operation in which the aircraft was lost on August 4, 1944. Another was PB538:60-M, in which Capt E. Swales was flying when he, too, was awarded the VC.

Three modifications to the defensive armament appeared in 1945. To the four-gun tail turret was added a small radome at its base, as on PB991:GT-H of 156 Sqn in use September 1945. A number of Lancasters had a two-gun tail turret which contained .50 in guns, a feature of RE157:SR-R,

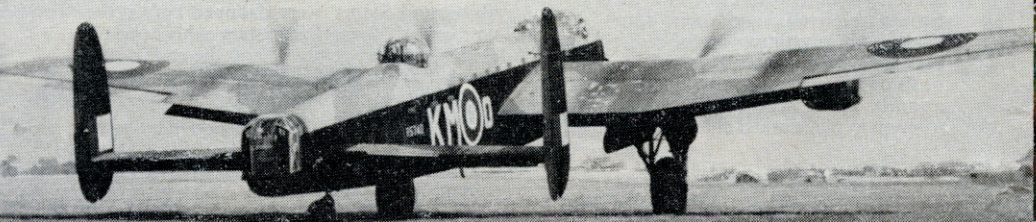
R5740:KM-O of 44 Sqn carries the large and small code peculiar to 44 and very few other squadrons, amongst them No 7.

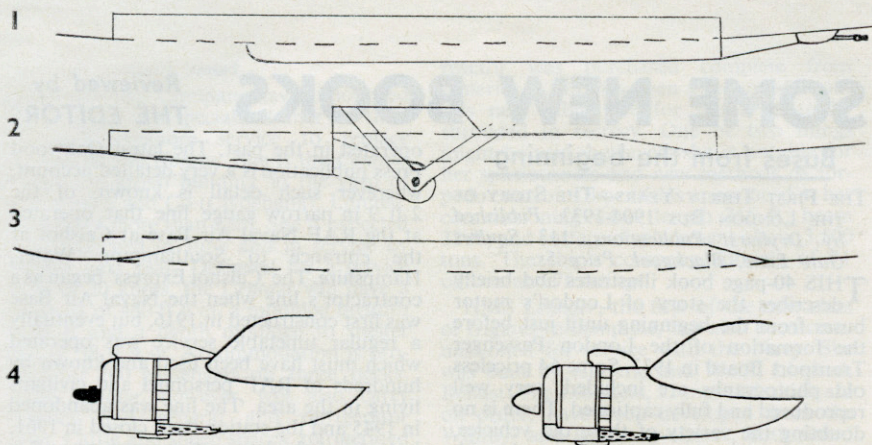
a Mk III of 101 Sqn in use April-May 1945. The Lancaster B VII was too late to participate in operations against Germany, delivery of this version beginning in the middle of April 1945. A number of Lancasters were operated with their dorsal turrets moved forward, as on the B VII, NX575:SR-U being one of these which wore the revised type of dorsal turret as fitted on the VII.

It was during the summer of 1945 that a major change in the colour scheme of the Lancaster was first applied. For Tiger Force intended to operate against the Japanese, tropicalised Mk I and Mk VIIs had black underside and white upper surfaces and fuselage sides. Serials and code letters were usually black. Many of these aircraft were subsequently used by the home-based squadrons of 3 Group, and included TW897:AU-Q of 148 Sqn in use in September 1947, and SW299:OJ-U. These aircraft had white under-wing serials, which had been introduced but a few days after the war ended in Europe, along with white code letters, on home-based bombers.

Lancasters converted for a reconnaissance role entered Coastal Command in 1946. An early example was RF307:OZ-W, of 179 Sqn, which had grey upper surfaces but was otherwise white; she had grey codes and fuselage serials, with black underwing serials. SW329:CJ-G of 203 Sqn was similarly coloured, had the post-war style of red-white-blue roundels, with yellow spinners, while her codes and serials were all black. Code letters on the Coastal Command aircraft followed the usual pattern, with unit letters ahead on the port side and aft on the starboard. The first quoted example had an H2S radome, the latter did not. During their service the Coastal Lancasters served also as ASR aircraft and carried a lifeboat as required. Before their replacement at the Maritime Reconnaissance School the Lancasters based there were repainted in the current glossy dark grey finish worn by Shackletons, RE164:H-U wearing this colour and having its red codes and underwing serials outlined white.

An all-silver finish was decided upon for the PR Mk Is used by No 82 Sqn for its





extensive survey operations in Africa, and PA474, still flying as a test bed from Cranfield, wears the code letter 'N' and the crest of 82 Sqn, left overs from its days with the squadron. Other test-bed Lancasters have abounded since the war years, and have included RE131 (used for development of the controls of the Brabazon airliner) with standard finish, post-war roundels and yellow 'P' marking and NG465, which had a Rolls-Royce Dart engine installed in her nose. The possibilities here for kit conversions are limitless—and for those with some dexterity ED371/G awaits, for she had a nose similar in shape to that of the Lincoln for experimental work at Farnborough.

The easiest type conversion from the Lancaster would be the Lancastrian transport, for which wooden nose and tail fairing to replace the turrets could easily be made. RAF Lancastrians had silver finish with black serials, such as VM725; very few wore code letters. Outer nacelles replaced by jet pods offer the possibility of the Ghost or Avon test beds. Alternatively, a BOAC Lancastrian with its silver finish and dark blue letters outlined in gold, etc, offers a break away from the military line, or one of the similar machines of BSAAC. Who said, 'You can't do much with a Lancaster'?

One last point—it would be a pleasure to see in print some wartime photographs of the Lancasters. Have any of our readers any examples to contribute to our pages?

M. J. F. Bowyer

Detailed points to incorporate in converting the Lancaster as suggested in this article are depicted above. They are:

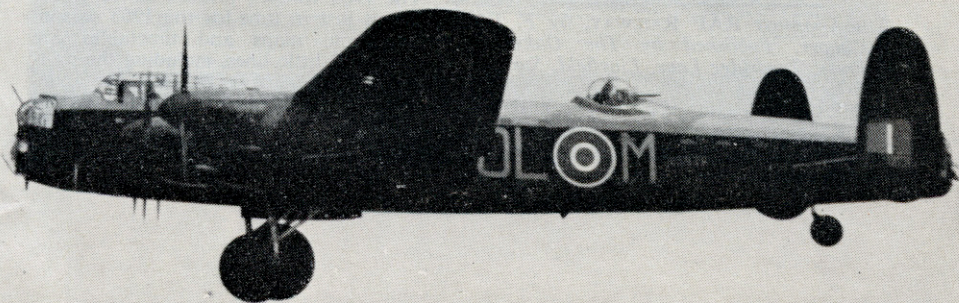
1 The Mk II had as a standard feature the deepened bomb bay doors aft of which a fairing led to an FN 21 turret. This was not always fitted, and then the fairing was frequently omitted. The under turret was installed on some Mk 1 aircraft, and the deepened bomb doors also, when required to permit carriage of large MC bombs.

2 Modifications made to the bomb bay of the 'dam buster' Lancasters, wherein the floor of the bomb bay was altered and the spinning devices for the weapon installed.

3 Bomb bay modifications to permit the carriage of 22,000 lb Grand Slam bomb; Tallboys were sometimes carried on aircraft thus modified.

4 The left hand drawing depicts the engine cowlings, etc, as fitted to the early Mk IIs, used by 61 and 115 Sqn. Many of these aircraft were later to have the cowlings, etc, as fitted to the remainder of the Mk IIs as shown on the right. Barely visible beneath the cowlings is the intake. On the early version the cooling gills were left in a dull metal finish, also the rear part of the exhaust stack, best represented on a model as a silvery grey.

R5626:OL-M of 83 Sqn photographed shortly before the squadron moved to Wyton to join the Pathfinder Force in 1942. She wears the then recently introduced roundels and red code letters.



SOME NEW BOOKS

Reviewed by
THE EDITOR

Buses from the beginning

THE FIRST THIRTY YEARS—THE STORY OF THE LONDON BUS 1904-1933. Published by Dryhurst Publications, 113 Squires Gate Lane, Blackpool. Price 5s.

THIS 40-page book illustrates and briefly describes the story of London's motor buses from the beginning until just before the formation of the London Passenger Transport Board in 1933. Some 64 priceless old photographs are included, very well reproduced and fully captioned. There is no doubting the variety of these old vehicles, and their operating companies each with their own distinctive livery had a fascination that is sadly lacking in the standardised monotony of today's London Transport fleet. The book covers the subject very well and the seven pages of text give a useful précis of this most interesting period in London Transport's history.

London pirates

PREMIER—THE TALE OF A LONDON PIRATE. Published by Dryhurst Publications. Price 3s.

A MORE detailed description of one of the many independent bus companies that helped to create the London scene before London Transport, is given in this story of the Premier Omnibus Co Ltd and Premier Line Ltd.

Before route licensing was enforced by the Traffic Act of 1924 a large number of pirate bus companies, some only possessing one vehicle, sprung up in the London area and commenced to skim off all available traffic on the most popular routes, much to the annoyance of the established companies, such as General and Tilling. Premier was one of the better organised of these independents and survived after the 1924 Act to register five routes ranging from Edgware and East Ham to Hampton Court. But times were tough in those days and the story of the company's ups and downs and eventual finish makes interesting reading, and is well told and illustrated in this 24-page publication.

Railway for the RAF

THE CALSHOT RAF RAILWAY, by F. W. Cooper. Published by The Oakwood Press, Tandridge Lane, Lingfield, Surrey. Price 6s.

ONE of the delights of railway enthusiasm is the information that comes to light from time to time of lesser-known and even unsuspected railway systems that have

operated in the past. The latest Oakwood Press publication is a very detailed account, wherever such detail is known, of the 2 ft 9 in narrow gauge line that operated at the RAF Naval Air Base at Calshot at the entrance to Southampton Water, Hampshire. The 'Calshot Express' began as a contractor's line when the Naval Air Base was first constructed in 1916, but eventually a regular timetable service was operated which must have been used and known by hundreds of RAF personnel and civilians living in the area. The line was abandoned in 1945 and the station itself closed in 1961, but one of the locomotives remains and is better known as 'Douglas' on the Talyllyn Railway in North Wales.

Cars compared

ABC BRITISH CARS—1963 EDITION, by Robin MacNicol. Published by Ian Allan Ltd, Craven House, Hampton Court, Surrey. Price 2s 6d.

THIS well-illustrated 64-page book is a useful reference guide to the wide variety of cars produced in this country. Fully illustrated, it gives technical descriptions of the models, and a useful five-page guide features at-a-glance details of the engine capacities, measurements and prices.

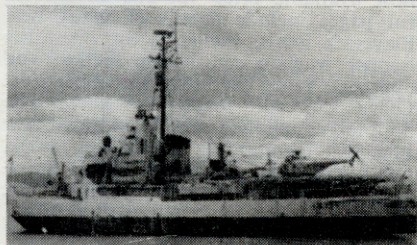
Most expensive car featured this year is the £9,000 Rolls-Royce Phantom V, while the cheapest is the Austin or Morris Mini at £447. Among the most potent machines described is the AC Cobra, powered by the 4.2-litre American Ford V8 engine, which gives the car a maximum speed of over 150 mph with a 0-100 mph acceleration time of only 10.8 seconds!

All the times

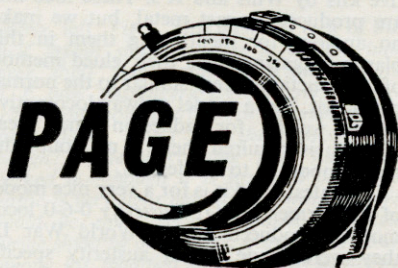
LIGHT RAILWAY GUIDE AND TIMETABLES. Published by David & Charles, 39 Strand, Dawlish, Devon. Price 2s 6d.

AMONG the attractions of many holiday centres are the increasing number of narrow gauge or amateur-run railways that provide novelty to tourists and railway enthusiasts alike. Filling a long-felt want, this publication gives full details of all these lines.

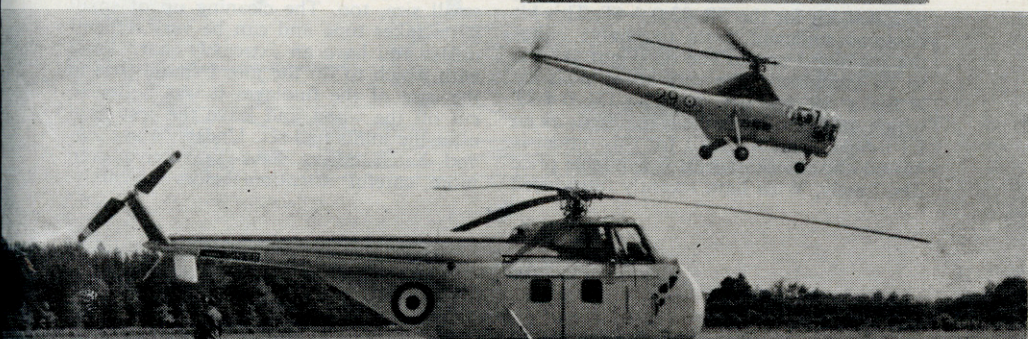
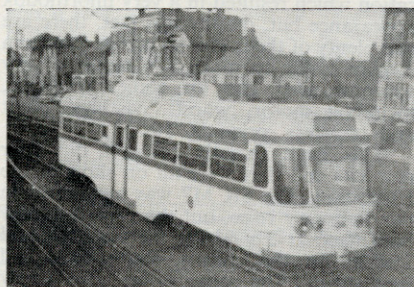
The 1963 edition, printed on 40 glossy pages, is just in time for the 1963 season. Information, maps and timetables are given on 13 little lines, including the well-known Welsh narrow gaugers, the Bluebell, Snowdon Mountain, RH & DR and Isle of Man railways, to name but a few. Further information on other railway projects and amateur societies is also given.

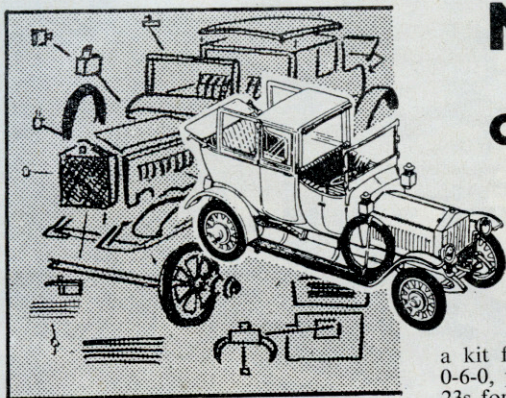


PICTURE



Plastic model building is almost a full-time hobby for Mr J. W. Stevens, of Folkestone, Kent, many of whose models have appeared in local shops and exhibitions. He sent us this fine shot (top) of a selection of his work (all built, incidentally, from Airfix parts) and wins our picture of the month award. The tall building on the left is a futuristic design for a multi-storey block suitable for use as flats or offices, while the model on the extreme right is a hospital. Both have roof-top helicopter landing facilities. Other ingenious designs by Mr Stevens include a watermill, illuminated water fountain, fairground roundabout, houses, shops and railway bridges. Above: V. Young, of Wellington, New Zealand, sent this shot of the US Coast Guard icebreaker, USCGC *Eastwind*, taken at Wellington. A model of this vessel is featured in the Revell range of kits. Right: This Blackpool tramcar (No 316) was photographed by A. L. Jackson, of Forest Fields, Nottingham. Below: P. M. Barnato, of Farnham, Surrey, snapped this Westland S51 Dragonfly, hovering over a Westland S55 Whirlwind that has force-landed in a field.





New kits and models

**LATEST PRODUCTS
ON THE MARKET OF
INTEREST TO MODELLERS**

a kit for a model LMS (ex Caledonian)
0-6-0, price 39s 6d for the body kit and
23s for the chassis. N.S.

Model Railway Exhibition news

The 38th Model Railway Exhibition held by the Model Railway Club after Easter brought the usual crop of new trade items displayed by the many commercial exhibitors. Space will not allow us to mention them all, but the model railway enthusiast will be most interested in the new locomotive kits by Wills and K's. These loco kits are produced in cast metal, but we make no apology for mentioning them in this plastic magazine since their glued method of construction is very similar to the normal plastic kit. For a model railway locomotive where weight for adhesion and great strength is required there is no doubt the metal model is to be desired.

The latest K's kit is for a very nice model of the former SR Q1 *Austerity* 0-6-0 locomotive. Produced during World War II, they were made to an austerity specification which resulted in a very unorthodox appearance but, despite this fact, there are still plenty of them around on the Southern Region today to make K's model a very welcome one. The kit comes complete, including motor, wheels, castings, paint and transfers, price £6 16s.

Wills have recently brought out four new kits and they were all on show at the Exhibition. The SR M7 was mentioned in our February issue, but the price has now been fixed at 39s 6d for the body kit and 26s 3d for the chassis, less wheels and mechanism. The same prices also apply to a new kit for the SR 02 0-4-4T. This kit contains sufficient parts to enable either the mainland or the Isle of Wight version to be assembled. The very latest Wills kit is for a SR (ex LB & SCR) D1 0-4-2T which may also be built, if required, as an E1 0-6-0T. The body kit for this model is 46s 6d and the chassis kit is available price 23s. Lastly, Wills have recently introduced

New catalogue

We have received the latest third edition Playcraft Railways catalogue, which is now available price 4d. The 24 colourful pages include details of many new Playcraft items, including an operating hopper waggon set, bridge section and approach ramp pier sets, travelling Post Office van and locomotive shed. The Simplex coupling is now fitted to all new Playcraft locomotives and rolling stock, but a coupling conversion bar is available for users of the older stock. N.S.

Solving the space problem

One way to overcome the space problem is to reproduce your kits in two sizes and Heller, the French plastic kit manufacturers, have done just this with four in a new series, to roughly 100th scale. These four, the Alize, Etendard IV, Mirage II and Magister, are miniature replicas of the 1:50 scale kits which are already on the market, but although they certainly do save space they are nowhere near so good as their larger scale brethren.

In this size, wing cross sections become too large, wheels are not accurate and such things as hatch and wheel well covers are totally out of scale. Rivet detail, too, becomes enormous but this can always be rubbed down if you are determined to buy these kits.

Flashing seems to be a problem on this small size, too. The cleaning up of small parts takes time and can be very difficult unless you have an extremely sharp knife with which to do the job. I found that in the case of the fuselages it was better to cut off the worst and leave the rest until after the joints had set. Undercarriage legs and hatch covers have to receive even more careful attention before assembly.

Each kit is packed in a polythene bag and has a separate instruction sheet which isn't a great deal of help in assembly. The price of each kit is 3s 3d and they are available from BMW Models. They should be just the job for the enthusiast who doesn't have a great deal of room or who wants to supplement the Faller range of 1:100 scale models.

A.W.H.

A French 'chopper' and two re-issues

Heller have recently released a 45 part Alouette III helicopter to 1:50 scale. Costing 14s this kit is the second helicopter in the Heller series. I found the assembly remarkably easy, provided that you disregard the instruction sheet, as the various parts bear no relation whatsoever to most of the parts drawn in the plans. In fact I've got one piece left over from this kit and I just don't know where it goes! It doesn't marry up with anything in the instructions and remains a mystery as the kit is obviously finished with no parts missing.

The two re-issues from Heller this month are the Mirage III and the Etendard IV. They are to 1:50 scale and are very nice models. Both are of the prototype aircraft and can be modified very simply into standard production types. Transfers aren't very good and the instruction sheet for the Etendard could be better.

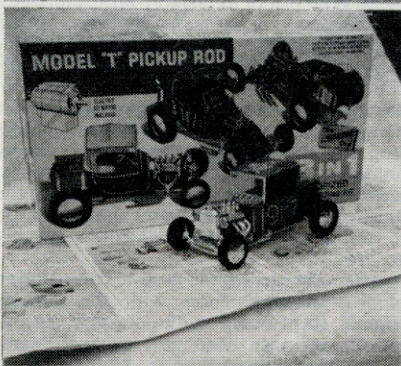
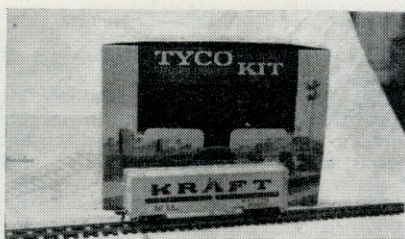
For the gimmick-minded, each kit has retractable undercarriage, hinged flaps and openable canopy. Personally I don't like too much of this type of thing as they are difficult to work properly and are so susceptible to damage. All three kits can be obtained from BMW Models who supplied our samples. Price of the Mirage is 19s 11d, the Etendard 16s 11d.

A.W.H.

HO scale refrigerator car

We have received a sample from the range of Tyco HO scale American prototype railway freight car kits, produced by the American firm of Mantua. A fine model of a Kraft Cheese refrigerator car, it is illustrated this month.

The kit is simplicity itself to assemble, since very little construction work is required. The plastic bodywork is moulded in one piece and is supplied ready painted and lettered. The lettering is nicely done, in three colours, and the detail incorporated in the plastic moulding is first class. The cast metal floor screws to the bodywork and gives the right amount of weight to the vehicle, distributed in the correct place and ensuring a very low centre of gravity. Ready-assembled cast metal bogies are simply screwed, by self-tapping screws, to the metal floor, after first assembling the NMRA couplers. The simple insertion of a brake wheel to the brake gear housing at



Tyco Kraft refrigerator car and Lindberg Model 'T' Pickup Rod.

one end of the car completes the model and it is ready to run.

The bogies incorporate plastic insulated wheels mounted on steel axles that run in needle point bearings. The car rolls extremely well and the kit can be thoroughly recommended both for its realistic appearance and excellent performance. The price of the Kraft Refrigerator kit is 19s 11d from BMW Models. This is only one of several attractive items in this range.

N.S.

Model 'T' Pickup Rod

The range of American 3 in 1 car kits seems never ending. The latest in the long line is a Lindberg kit for building one of three variations of a Model 'T' Pickup Rod. For anyone not so well informed on American motoring matters, I would refer to the instruction sheet which explains that 'T' Pickups have increased in popularity in recent years. 'With their many chrome accessories, custom upholstery and shortened pickup bed, they make ideal show rods. With wind cheating covers added such as the nose and body covers and full racing engines for power, these machines are strictly go rods and make their showings

Continued on next page

New kits and models—Continued

at the $\frac{1}{4}$ mile drag strips'—now we all know.

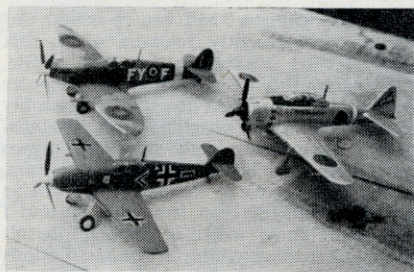
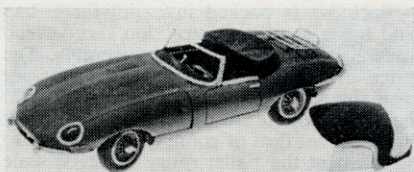
Certainly the 1:24 scale Lindberg kit, cast in bright red plastic with a generous amount of 'chrome' parts and custom decals, makes up into a natty little model, whichever version is chosen for assembly. A somewhat unusual feature of this motorised kit is the fact that even the motor has to be assembled. The motor parts include armature laminations, magnet, metal pole pieces, phosphor bronze brushes and commutator parts, etc, but assembly is straightforward, following the excellent step-by-step illustrated instructions (incidentally, fully described in four languages). No on/off switch is incorporated in the design, since the two-pole motor enables stopping and starting to be done by simply holding or push starting the vehicle. Despite all plastic axles and bearings the finished model rolls well and should live up to its big brothers' reputation of a strictly go rod.

After completing the motor, construction of the kit commences with the dummy engine, resplendent with 'chrome' carburettors, cylinder head and exhaust manifolds. The chassis has a built-up front suspension in 'chrome' and other bright parts are headlamp rims, radiator and silencers. The bodywork is very simple and on the motorised version is detachable to give access to the twin battery cells, not of course supplied with the kit. Any number of bodywork variations are possible and painting can also be good fun, since anything will do—the more outlandish the better.

Certainly the Lindberg 3 in 1 Model 'T' Pickup Rod is fun to make and operate. It costs 23s 9d from BMW Models. N.S.

Another E-Type Jaguar

The long-awaited Revell E-Type Jaguar is now available and a fine 1:25 scale model it turns out to be. The kit is moulded in red plastic and, in addition, has just the right amount of 'chrome' accessories. The 'chrome' wire wheels are particularly noteworthy features and they are beautifully shod with soft black rubber miniature Dunlop Road Speed RS5 tyres. The engine is also nicely done and features 'chrome' rocker covers, carburettors and exhaust manifolds. The rear suspension is very well reproduced with dummy disc brakes and the front suspension features steerable wheels and working track rod. The front frame members make up into a rigid unit and the bonnet can be opened forwards to expose the engine and front chassis.



Revell's new E-Type Jaguar (top) and Monogram Spitfire, Me 109 and Zero (reviewed last month).

The Revell instructions are very clear, both in illustration and description, and the constructor is carried through 18 separate stages of assembly. Brief painting details are included but I would have welcomed more information in this respect, especially as one tries to aim at authenticity in a model of this sort. A list of official Jaguar colours and interior trim details could perhaps be included at very little extra cost to Revell. The model can be made either as a hardtop or as an open car with tonneau cover. Either way the nicely-detailed cockpit can be viewed easily as the hardtop features a large expanse of clear plastic glazing mounted in 'chrome' window surrounds. One example of the many attentions to detail is the windscreen washer bottle moulded in clear plastic. The kit costs 15s.

I found this a very interesting model to make and quite the best Revell car kit for a long time. It is a faithful and accurate replica of this extremely popular car and there is no doubt the kit is going to be in very great demand since it is absorbing to make, attractive to view when complete and as up-to-date as the minute. N.S.

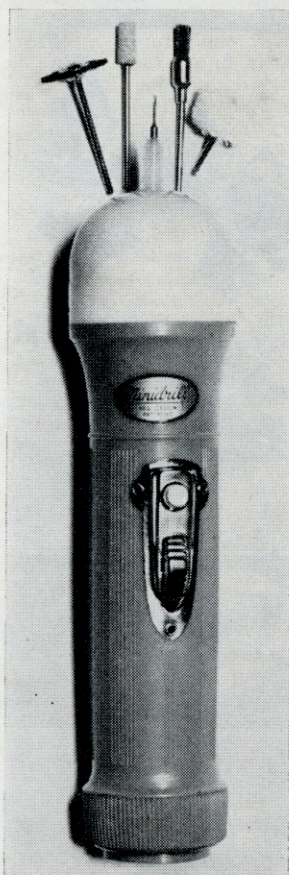
Five more from Spain

Five more new arrivals in the 1:86 scale Spanish-made Anguplas series of model vehicles (reviewed last month) are now available from BMW Models of Wimbledon. They are a Volvo P1800 coupé (2s), a Land-Rover fire-fighting vehicle (with hoses, spare wheel, and pumping equipment) for 2s 3d, a fine E-Type Jaguar coupé (2s 3d), a Ford Consul Classic (1s 9d) and

Continued on page 28

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New kits and models—Continued

a Mercedes 220SE (2s 3d). Chrome parts and windows are again well in evidence on these models, which are ideal for use with HO/OO scale model layouts. *D.R.*

Fold-flat seats

Several intriguing features are to be found on the new Corgi Citroen Safari ID19, which has just been released. Most noteworthy is the folding rear seat. By turning a small knob under the car, the two halves of the seat can be folded flat, to increase the load-carrying space, or raised again to accommodate passengers.

The fully-sprung Citroen is finished in the livery of 'Wild Life Preservation', with an authentic bonnet emblem. There is also a split tailgate, the upper part lifting and the lower part dropping, to give access to the load carrying space inside. The inside of the car has a ribbed floor, wheel arches, steering wheel, a detailed fascia board and two front-seat passengers. There is also a half-open window in one of the rear doors.

On the roof is a built-in luggage rack carrying a removable load of jerricans and camping equipment. The model is 4½ inches long, and sells for 6s 4d.

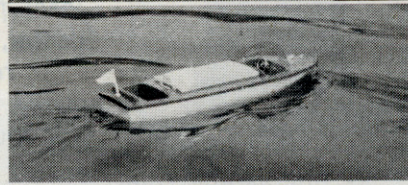
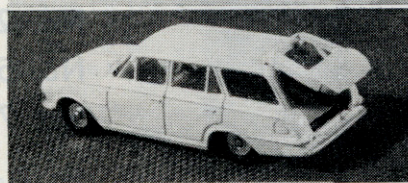
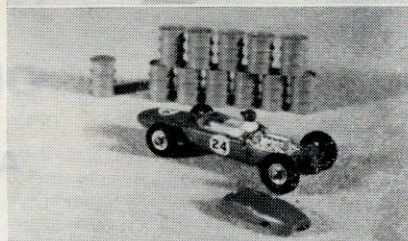
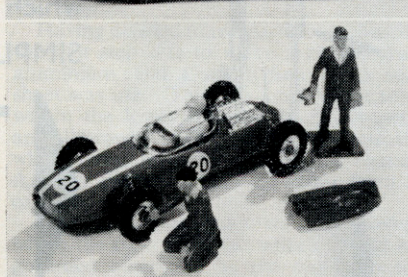
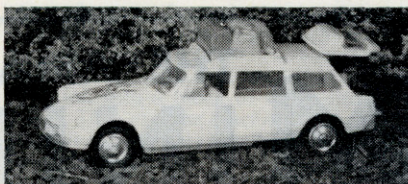
Another estate car just released by Corgi is their new version of the Plymouth Sports Suburban. Finished in red and light grey, it now has Glidamatic spring suspension as well as seats, windows and a steering wheel. Price is 4s 2d. *D.R.*

Grand Prix line-up

Two more new Grand Prix racing car models are now available in the Dinky Toys range—a Lotus and a Cooper. The Lotus, finished in green, is fitted with racing numbers, four-wheel suspension, a driver and a windscreen. The engine cowl is removable, giving access to a replica of the V8 Coventry Climax engine. The model is 3½ inches long and sells for 3s 11d.

The Cooper is finished in blue, with white stripes down the nose. It has four-wheel suspension, a windscreen, driver and racing numbers. The engine cowl is similarly detachable to reveal the engine. Price is also 3s 11d. Another new Dinky is the Vauxhall Victor estate car, finished in yellow, with an opening tailgate, windows, and four-wheel suspension. Price is 4s 11d.

We are now in the midst of the model boating season and Hornby have just released a new electric motor launch, *Capri*, which is powered by two 1½ volt batteries and can do nearly one knot! Strongly made in red and white polystyrene, it has twin cockpits, a perspex screen, and 'chrome' steering wheel and fittings. Length of the launch is 11½ inches, and the price 17s 6d excluding batteries. *D.R.*



Top to Bottom: Corgi Citroen Safari ID19 (complete with fold-flat rear seats and opening tailgate) and their new version of the Plymouth Sports Suburban; Dinky's Grand Prix Cooper and Lotus have detachable engine covers, while their new Vauxhall Victor estate car features an opening rear door; Hornby electric motor launch, *Capri*, gets under way.

Readers write . .

Missing mass balance

For some time now my eldest son (11 years old) has been an Airfix model enthusiast, and a reader of your magazine. Although I am by no means totally won over by the present 'instant' model making from pre-cast plastic (I learned my trade with old-fashioned balsa and glasspaper), I have had a certain amount of pleasure out of seeing a lot of my old wartime acquaintances appearing about the house. As an ex-member of the RNVR Air Branch I find that they bring back many memories for me.

The latest model which my son has made is the Avro Anson—an aircraft which I know well. In fact, before joining the Navy in 1943, I worked in an aircraft factory where we had a sub-contract for making Anson rudders.

This brings me to the point of this letter. One of my jobs was to make the 'mass balance' for the rudder. I must have made dozens of them! Most aircraft have a part of the rudder at the top which projects beyond the hinge, but the Anson makes do with an extension of elliptical section tubular steel which has a lead weight in the end. (I can smell now the fumes from the furnace fire where I used to melt the lead!) The mass balance also included the stern attachment for the radio aerial.

All this you must know, since the mass balance is shown in the illustration on the kit packet. But where is it on your model? When I gave my son permission to buy the kit it was with an expectation of pleasure in seeing something that would remind me of earlier days, but now he has had to make a 'scratch' balance out of scrap plastic to satisfy my desire for accuracy. To me, at least, the most important part of an Anson is its mass balance!

Incidentally, I wonder if you know that, because of the very large amount of wood used in the construction of this aircraft, there was a popular theory amongst those who flew it that, if it should come down in the sea, all that was required was a pair of oars and you could row back home!

FRANK WATKINSON, Scarborough, Yorks.

Propeller realism

I should like to thank the contributors to AIRFIX MAGAZINE, who regularly supply interesting conversions which make modelling so much more entertaining for me, as an average modeller with little chance of achieving ultimate realism.

I think I may be able to enlighten you as to why, in a recent issue, R. M. Wallsgrove thought the starboard side of pre-war

LETTERS TO THE EDITOR

LETTERS to the Editor can only be answered in the magazine. However, we are always pleased to receive your comments and pictures, which will be considered for publication. Readers whose letters are published each receive a free Airfix kit of their choice. Submitted material and pictures can only be returned if accompanied by a stamped addressed envelope, and the Editor cannot accept responsibility for safe keeping of any such contributions, neither does he necessarily agree with comments expressed by correspondents in the letters column.

Gladiators to be light grey. I have just read *Aircraft Camouflage and Markings 1907-1954* and in various places, including the glossary and a colour plate, fighters from March 1939-July 1940 are shown as stated by Mr. Wallsgrove. No mention is made of white starboard undersurfaces.

When trying to portray flight, I find that a circle of stiff transparent polythene 'painted' with a brush almost wiped dry, to simulate the moving propeller and fixed in the appropriate position behind the spinner, looks very realistic.

May I make a plea for 1:72 scale models of the Catalina, JU 88, JU 52 and B 25 Mitchell.

M. J. TILEY, Clutton, Nr. Bristol.

A perfect water-line

Some of your readers may be interested in my method of finishing off my boat models. My hobby is historical boats, and where the hull joins the water-line I often find that, perhaps by a fraction, the line wavers along the hull.

To combat this, I asked my friends to keep the gold tearing bands a number of cigarette manufacturers put on their Cellophane wrappings. This I lay flat and, using a steel-edged ruler, cut it away from the surrounding Cellophane. When stuck on, this makes a perfect water-line and enhances the look of the model.

CAMPBELL BEAN,
Rutherglen, Lanarkshire.

Conversion kits

I was interested to read the letters in the March and May AIRFIX MAGAZINE on aircraft 'conversion kits', since I am convinced that sales of any particular kit would be increased if we collectors who want to build up a representative series of models, but lack the time or skill to do our own 'mods' in wood or other medium, could make more than one Mark of any machine from parts included in the kit.

The Royal Navy/Kriegsmarine versions of the Sea Hawk are a simple form of what I should like to see much more often, and I

Continued on next page

Readers write—Continued

feel sure modellers would be willing to pay a little extra for the additional parts needed.

As a hypothetical example, let us assume that the Ju 88 figures on the Airfix list of future issues. This would, I suppose, normally fall into the 4s 6d price range of Series 3. But why not offer 'solid' and glazed nose sections, A- and G-series tail assemblies, radial and in-line nacelles and (possibly) alternative outer wing panels and 'promote' it to the 6s range?

The basic kit could then be made up as a Ju 88A, C, G, H or R sub-type and I wager sufficient people would make every possible variation to make the idea well worth while.

And please, Airfix, put in the radar antennae!

S. J. HUTCHINGS, Taunton, Somerset.

No opposition!

I quote from the January 1962 AIRFIX MAGAZINE, 'A clear-cut note of a bugle over an oasis fort, the rattle of rifle and machine gun fire, and the shrill war cries of attacking Bedouin tribesmen can almost be heard when an Airfix pack of foreign legionnaires is opened.' For the past 16 months my legionnaires have been rushing to the battlements to fight imaginary foes. Surely a pack of Bedouins would be a hot-seller as opposition—yet another suggestion to add to the many you doubtless receive.

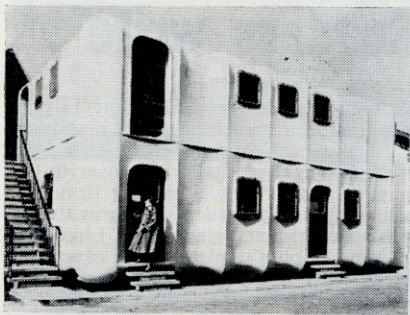
While writing I would like to say how much my two sons and I enjoy your magazine, especially the new Motor Racing series. I was most interested in Mr Wright's letter in the March 1963 issue regarding a 'conversion kit'. The thought that this would be useful had often occurred to me, and I would suggest one to convert a Wellington to a GR variant with outside radar masts.

RONALD FALLON, Mablethorpe, Lincs.

Praise for the 25 pounder

Having made up the Airfix kit of the 25 pounder Field Gun, I was so impressed that I must write to you. I think the model is excellent and one of the best produced by Airfix. I have only one very small criticism. I found that part 59, the hand-wheel, was totally different in shape from the diagram. However, the handwheel is very similar to the real article on the 25 pounder, one of which I have closely examined.

One other point; the painting instructions say: 'Complete assembly Dark Earth M5 with irregular patches of Dark Green M3 on the tractor only. However, the real thing and the picture are just the



PREFABRICATION IN PLASTICS

This building, believe it or not, is made largely from plastics, and has been developed to house a new telephone exchange/office block for the Tyseley, Birmingham, factory of Bakelite Ltd. It weighs only 15 tons, whereas a conventional brick building of the same size would weigh about 84 tons. In 1961 a rather similar, though smaller, type of building was erected at Thames Haven, Essex, for British Railways to house electrical and signal equipment. Its success decided Bakelite to go ahead with this latest design, which could well set a new trend in prefabricated buildings.

opposite and the model is moulded in green polystyrene.

I am very pleased with the order of the kits produced by Airfix, but I plead for the Fairey Barracuda.

M. SIEBERT, Ilford, Essex.

Do-it-yourself waves

I am writing to say what a wonderful kit I think your *Endeavour* is. I feel that it is the best value I have ever seen, and I still can't get over the detail on the little figures, which were only half an inch high.

I would like to take this chance to tell you how I finished my model, to give it a sea-going appearance, and perhaps some fellow readers may like to try it. All you need is a 2s tin of linseed putty, a piece of hardboard and some green, blue, white and black paints.

The piece of hardboard can be any size you like; mine was 12 inches by five inches. Begin by building up the putty on to the hardboard to about one inch in height. As you lay it on use your fingers to shape (at this stage only roughly) waves.

Now you can either insert the model into the putty permanently, or remove it so that the putty hardens, leaving a shape into

which the model can afterwards be placed.

The next step is to paint the putty with 'dope', as you would with balsa wood. At this point, using a soft bristle brush, you will find it easy to improve your shapes of waves. After a few minutes, begin painting before the 'dope' has fully dried. Allow your blue, green and black to mix by gently stroking with a dry brush. Use the same procedure with the white. Dapple the crest of some waves with white, then stroke gently with a dry brush and you will find your colours all merge. This finished base has a high shine and, if painted carefully, can look very realistic indeed.

I should like to close by saying how much I enjoy your magazine and that I feel that Harvey Smith of Wakefield (Reader's write, March edition) has a great idea about the article on just how you turn out your great kits.

JAMES FINNIE, Glasgow.

Storage problem

I have been told by some retailers that plastic kits deteriorate in storage. Unless extremes of temperature are involved, I find this difficult to understand, but I would be grateful for any advice readers can offer on this problem. The theme of my collection is Royal Naval Air Service and Fleet Air Arm aircraft and, in order to include multi-engine types, Coastal Command.

I now have 49 kits, (31 are Airfix) which are mostly to 1:72 scale, though inevitably some are of the larger scales and include Avenger, Skyraider, Avro 504, Nieuport Scout and DH4.

There is enormous scope for conversion and navalisation. The largest job will undoubtedly be from the Frog Venom to Sea Venom, entailing complete remodelling of the fuselage. Also the Revell Skyraider AD6 to the Fleet Air Arm AEW1 with Guppy radome, modulator fairing, tail stabilisers, etc. The Airfix Tiger Moth will become the DH Queen Bee (with faired-in cockpit and Auster floats), the Hart will develop into a float Osprey and the Mosquito VI will sprout an ASH 'bomb' and modified undercarriage to become a Mk 33.

Incidentally, an Airfix Mosquito VI which I made up to represent one of our Mk VI aircraft in 811 Squadron (1945/46) needed some pretty drastic surgery. The nose had to be shortened by about $\frac{1}{8}$ in., the undercarriage completely remodelled (in particular the width of the tyres was much too narrow) and the stiffener added to the port side over the rear fuselage access door. Finally there should be no centre frame in the windscreen! However, apart from this lapse I have nothing but praise for your kits.

May I close with a plea on behalf of the

Fleet Air Arm collector? At your next cabinet meeting please consider some of the old naval faithfuls, for instance Flycatcher, Fulmar, Albacore, Firefly, Barracuda, Sea Hornet, Sea Fury and Wyvern.

Lt Commander, M. NICHOLAS,
Helston, Cornwall.

Tip from New Zealand

I have watched the deserved progress of the Airfix company for several years. Quality products at more than reasonable prices have won the company world markets. I suggest that they can *treble* their sales of OO gauge rolling stock by the provision of two-colour kits. Where each kit set is at present made from a single mould, provision for all chassis items to be moulded in *black* and all body parts of a second colour would result in a tremendous boost to sales.

The cheapness of these kits is slightly offset by the degree of black-painting required to be done. Customers would as soon be saved this repetitive labour (albeit at increased cost) and would prefer to spend the same time *assembling* three wagons where at present only one can be made, due to time spent on painting.

German and American firms feature two-colour plastic kit sets; and it is in this respect only that Airfix can expect competition.

If future OO gauge rolling stock can be made in this way, I for one will treble and quadruple my order for each item. The re-organisation of factory and packaging lines would surely be justified by greatly increased demand!

L. A. GRIBBLE, Northland, New Zealand.

Early buses

Mike Bryant's article in your April issue made me decide to construct a plastic model of the Great Western Railway motor bus car I (1903). I was most interested in 'Tools of the Trade' which should be of great help to beginners.

No drawings or model exist of the first railway motor bus, but I have photographs and detail knowledge. Any plastic kits of early motor buses, before the 'B' type (Old Bill) would help.

Any modeller who is interested in models of early motor buses are welcome to write to me.

W. CHAS. BOLTON, (Age 80),
76 Pound Road, Banstead, Surrey.

Any offers?

One of our readers in Japan, Hideo Hoshino, of 86-3 Asaoka-cho, Chikusa-ku, Nagoya, Japan, aged 15, would like to correspond with an English boy interested in plastic kits. Those interested are invited to write direct to the address given.

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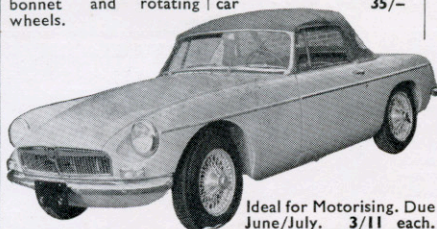
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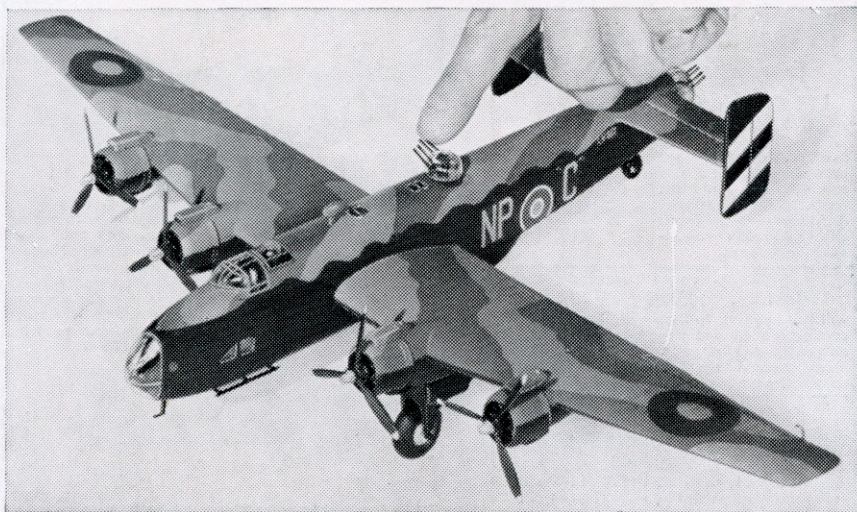
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